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CHARLES E. de M. SAJOUS, M.D.,
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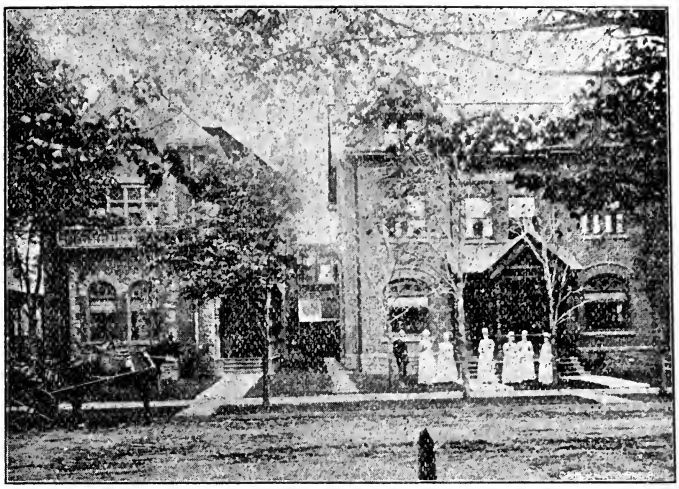

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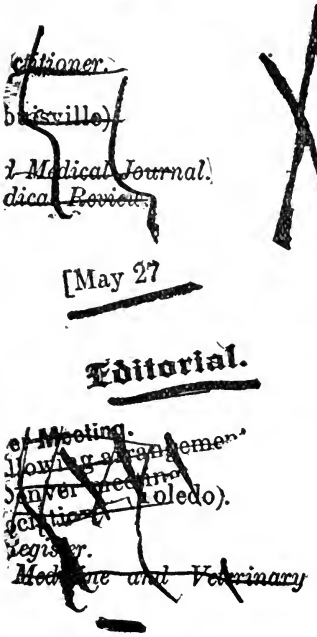

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Cyclopædia of the Year's Literature.

CHILBLAINS.

Symptoms.—M. George Thibierge[1] reviews in an interesting manner this disorder, which, in winter, is the cause of much suffering in our Northern climates. Chilblains are always painful in a more or less marked degree; their development is preceded by pruritus and a sensation

[1] Jour. des Praticiens, Jan. 9, '97.

of heat and of pricking; after they have become established they are also accompanied by the same sensations, which are tolerable when the diseased parts are exposed to cold, and extremely painful when subjected to heat; changes from cold to heat, and frequently rest in bed, arouse and increase their intensity; this symptom is of great diagnostic value. Even simple pressure is extremely painful, however slight the lesions. To this may be added tumefactions and ulcerations, thus rendering chilblains veritable infirmities.

Chilblains may be followed by a general tumefaction of the regions attacked, which is the result of local asphyxia even more than of the chilblains themselves. In the hands this tumefaction gives an entirely peculiar sausage-like aspect to the fingers, somewhat like that resulting from acromegaly.

Another consequence, still more rare, of chilblains is the production of localized and persistent vascular dilatations; true acquired capillary angiomata, on which there are small papillomata resembling warts.

Etiology.—According to Thibierge,[2] the erythematous congestion of the hands, or rather of the extremities, which in certain subjects appears when cold weather sets in, and is one of the forms of what is known as Raynaud's disease, is an important predisposing cause. In young people the insufficiency of peripheral circulation which it causes should be attributed especially to the slight paralysis of the vasomotor system; in older persons it arises principally from atheroma, which impedes the local circulation, the effects of which are further marked by weakness of the myocardium and by the blood-dyscrasia depending upon senile interstitial nephritis. It must be noted, moreover, that this asphyxia of the extremities is not necessarily followed by chilblains, and that they may develop in non-asphyxiated regions.

Defective or insufficient alimentation singularly facilitates the development of chilblains; inactivity also helps their development; cold, aided by defective conditions of circulation and of the functions of the economy, is the cause of chilblains, and it exerts still greater effects when the skin is wet or not properly dried, or when it is suddenly succeeded by heat. Chilblains may often be prevented if the parts which have been exposed to the cold are slowly and progressively warmed.

A. E. Wright[3] shows that the very familiar form of serous hæmatoma known by the name of chilblain is dependent upon a condition of defective blood-coagulability, and that it can often be relieved by increasing the patient's blood-coagulability. He has investigated the conditions of blood-coagulability in ten cases of chilblains. Two of these were cases of aggravated chilblains occurring in adult men. The time required for blood-coagulation of these patients was, respectively, 9 minutes and 9 $^1/_4$ minutes. Four of these cases were cases of aggravated chilblains occurring in adult women. The duration of the blood-coagulation in these cases was, respectively, 13 minutes, 11 minutes, 8 $^3/_4$ minutes, and 7 $^1/_2$ minutes. Lastly, four of these ten cases were mild cases of chilblains in schoolboys. The duration of the coagulation in these cases was, respectively, 11 minutes, 9 $^1/_4$ minutes, 7 $^3/_4$ minutes, 4 $^1/_2$ minutes. It is obvious, therefore, when it is considered that the normal duration of blood-coagu-

[2] Jour. des Praticiens, Jan. 9, '97.

[3] Lancet, Jan. 30, '97.

lation varies between 3 and 4 minutes, that all these cases of chilblains with the exception of the last case were associated with a very notable defect of blood-coagulability. This fact stands in relation with certain other facts which obtrude themselves more directly upon the clinician's attention. These facts are the greater liability of children to chilblains; the fact that chilblains are prone to occur in persons who give a history either of nose-bleeding or of urticaria; the occurrence of chilblains in persons who are characterized by a lymphatic habit of body; the not infrequent occurrence of chilblains in persons who are the subjects of malarial cachexia; and the not infrequent occurrence of chilblains in hæmophilic families.

The notorious liability of children to chilblains is, no doubt, in part referable to the fact that the influence of cold makes itself felt more upon the relatively small extremities of the child than upon the relatively large extremities of the adult. Another probable factor in the etiology is the fact that the lime-salts upon which the coagulability of the blood depends are, in the growing child, continually being removed from the blood in order that they may be deposited in the bones.

In the relation between the lymphatic constitution and a predisposition to chilblains will be understood, first, that the essence of the lymphatic constitution is to be found in a water-logging of the tissues, which is dependent upon an excessive transudation of lymph; secondly, that it will require only a very slight increase of transudation to convert such a water-logged condition of the tissues into perfectly-definite hæmatomata, such as are seen in chilblains; and, thirdly, that, in all probability both chilblains and the water-logged condition of the tissues which are met with in the lymphatic patient are ultimately referable to a defect of blood-coagulability. The subjects of malarial cachexia are not infrequently also the subjects of chilblains.

Treatment. — Thibierge[4] states that the conditions which predispose to the development of chilblains show what importance a general tonic medication should have in their treatment and their prophylaxis. Codliver-oil, preparations of iodine, iron iodide, and arsenic are indicated in all cases, and their regular and prolonged employment often leads to the attenuation, in a very great proportion, of the tendency in certain subjects to chilblains.

Quinine sulphate often renders great service in an affection in which the circulatory troubles of the extremities play an indisputable part. Brocq obtained good results from the association of quinine sulphate and of ergotine in doses of from $^3/_4$ grain to 3 grains with powdered digitalis (from $^2/_{10}$ to $^3/_{10}$ grain) and the extract of belladonna (from $^3/_{100}$ to $^6/_{100}$ grain) in the form of pills, the employment of which was prolonged during the entire winter.

Inhalations of oxygen, which accelerate nutritive changes and often give remarkable results in asphyxia of the extremities, are strongly indicated in those subjects in whom the sluggish condition of circulation predisposes them to chilblains.

Regular exercise, walking, gymnastics, cold effusions, and general stimulating lotions are also extremely useful prophylactic means in the majority of subjects in whom a former experience has demonstrated their tendency to the development of this infirmity.

The hands should be covered with

[4] Jour. des Praticiens, Jan. 9, '97.

thick and sufficiently warm gloves, but rough woolen gloves should be avoided. They, like the feet, should be washed in warm water (not in cold) and carefully dried on a towel (never before a fire), and then powdered with starch or talc in order to remove every trace of dampness.

The hands should not be allowed to remain too long in cold or soapy water. Shoes and stockings should be comfortably large; they should be thick enough to protect the feet against the action of the cold, especially when there is snow on the ground. If sweating accompanies the chilblains, repeated foot-baths must be resorted to and the parts powdered with starch or talc, to which has been added from 1 to 2 per cent. of salicylic acid.

Foot-stoves should be absolutely proscribed; if the feet are cold the best way to make them warm is to rub them well, but gently, with a slightly-warmed piece of flannel.

Foot-baths containing small quantities of astringent decoctions of walnut-leaves, of ash-leaves, of eucalyptus-leaves, of oak-bark, etc., of from five to six minutes' duration, constitute a very useful means of preventing frost-bites by increasing the resistance of the skin.

If the lesions are not very intense, and characterized only by red patches not very extensive and scarcely prominent, the preceding modes of treatment are indicated, particularly the local astringent baths and the absorbent powders. But if the lesions are pronounced, the patches large and prominent, these modes of treatment must be associated with or replaced by other topical agents: ointments or collodion. The substances which are incorporated in them are intended to increase the consistence of the ointment, such as zinc oxide; or to allay the pruritus, such as opiates, carbolic acid, and menthol; or they are endowed with resolvent qualities, such as lead-salts, of which the most commonly used is lead subacetate, which is anticnesmatic.

When the lesions are constituted by red elements, with little or no infiltration of the skin, zinc-oxide ointment, such as the following, to which has been added a small quantity of carbolic acid or menthol, will suffice to allay the pruritus and cause the rapid disappearance of the lesion:—

℞ Zinc oxide, 150 grains.
Carbolic acid, 8 grains.
Vaselin,
Lanolin, of each, 225 grains.—M.

Another formula is this:—

℞ Zinc oxide, 150 grains.
Menthol, from 3.5 to 4.5 grains.
Vaselin,
Lanolin, of each, 225 grains.—M.

If the elements are more prominent, more inflamed, the preferable treatment is with an ointment containing lead-salts, such as the following:—

℞ Lead subacetate, 30 grains.
Carbolic acid, 8 grains.
Vaselin,
Lanolin, of each, 300 grains.—M.

Simple elastic collodion, or collodion combined with iodine or salol, or better still the collodion made with acetone, which makes a better covering and does not produce the fissures which occur so frequently after the use of ordinary collodion, is an excellent protector for the diseased surfaces, and allays the pruritus; but it should never be applied to ulcerating chilblains or to those on which blisters have formed.

The following formula is recommended:—

℞ Pyroxylin, 45 grains.
Acetone, 300 grains.
Ether,
Alcohol, of each, 150 grains.
Castor-oil, 60 grains.—M.

When the chilblains resist these topical applications, ointments containing silver nitrate, or painting with a 50-per-cent. solution of silver nitrate or with the tincture of iodine, often hastens their resolution.

If blisters form they should be opened aseptically and covered with a dressing of vaselin and boric acid, or with freshly-prepared carron-oil, to which has been added 2 per cent. of carbolic acid. If these blisters have been ruptured, or the chilblains are ulcerated, after bathing the parts with a weak solution of corrosive sublimate they should be covered with a dressing of vaselin and boric acid or with non-irritating plasters, such as zinc oxide, simple boric acid, and dermatol plasters, or Vidal's red plaster. If the ulcerations do not disappear they should be touched every two days with a silver-nitrate stick, or with tincture of iodine, and dressed with camphorated brandy, with Van Swieten's liquor, diluted one-half with water, or with aromatic wine. These dressings should be carefully applied, particularly on the toes and between the fingers, where, according to M. Besnier, it is well to place small tampons of absorbent cotton.

With regard to the treatment, A. E. Wright[5] says: "The obvious indication in a case of chilblains is to increase the patient's blood-coagulability, and, in conformity with these indications, patients are to be placed upon a regimen of calcium chloride, after duly cautioning them against lowering their blood-coagulability by the ingestion of sour fruits, alcohol, or excessive quantities of fluid."

Chéron[6] gives the following formula for rebellious chilblains:—

℞ Solution of lead subacetate,
Tincture of iodine,
Tincture of opium, of each, 5 parts.
Starch, 10 parts.
Glycerin, 140 parts.—M.

C. Binz[7] thinks that only chemicals capable of penetrating the epidermis can be expected to have any effect upon chilblains. To these belongs chlorine in the form of chlorinated lime. One part of this, mixed with 9 parts of paraffin ointment, rubbed into the inflamed parts for five minutes every night, will cause the pain and swelling to disappear in the course of a week. After each inunction the foot is covered with a very thick bandage. It is important that the ointment should have a strong odor of chlorine, and he points out that the chlorinated lime of shops has generally parted with its free chlorine. Another point of importance is that the drug should be mixed only with paraffin ointment; for when mixed with lard, and especially with lanolin, it gives up its chlorine too quickly. The ointment is useful only so long as it gives out a decided smell of chlorine.

F. W. Forbes Ross[8] applies the secondary current of the faradic battery from five to fifteen minutes, increasing the current gradually to high strength, the poles being in contact with the affected area, having previously dipped the electrodes in a saturated solution of sodium chloride. The tissues are gradually blanched, commencing after about five minutes. The itching is completely and promptly stopped by the first application,

[5] Lancet, Jan. 30, '97.
[6] Jour. de Méd. de Paris, March 28, '97.
[7] Fortschritte der Med., Dec. 15, '97.
[8] Lancet, No. 3832, p. 425, '98.

and a second, one or two days afterward, usually suffices for a cure. Seldom, if ever, does a third or fourth application become necessary.

GALL-STONES.

Symptoms.—F. Lange[9] remarks that, as long as gall-stones remain quiet in the gall-bladder, they will seldom give rise to any symptoms; but as soon as they become dislodged and commence to travel through the cystic or the common ducts the typical symptoms will begin. Acute impaction of gall-stones in the cystic duct happens not infrequently with solitary stones of larger size. Solitary stones are not always the cause of this affection; but, on the contrary, sometimes quite the opposite condition will be found. If the gall-stone passes beyond the cystic duct into the common duct and is arrested there, the symptoms of stagnation of the bile will make their appearance. Very frequently, however, inflammation of the gall-system, such as cholangioitis, pericholangioitis, or even liver-abscess, is associated with it. The principal point of resistance for gall-stones is the region of the papilla in the wall of the duodenum.

The ball-valve gall-stone in the common duct causes, according to Osler,[10] the following symptoms: First, jaundice of varying intensity, deepening after each paroxysm, which may persist for months and even for years; second, ague-like paroxysms, characterized by chill, fever, and sweating, after which the jaundice usually becomes more intense; third, at the time of the paroxysms pains in the region of the liver and gastric disturbance. Recovery may follow even after jaundice, chills, and fever have lasted for years; the conditions can be differentiated from suppurative cholangitis; the symptoms are probably caused by the ball-valve action of the stone.

The symptoms of gall-stone in the common duct are as follow: They are very variable. 1. The occasional or continuous presence of bile in the fæces. 2. Distinct variation in the intensity of the jaundice. 3. Normal size or only slight enlargement of the liver. 4. Absence or distension of the gall-bladder. 5. Enlargement of the spleen. 6. Absence of ascites. 7. Presence of febrile disturbance. 8. Duration of jaundice for more than a year.

Wilkinson[11] observed a case in which intestinal obstruction was produced by a gall-stone about the size of a pigeon's egg. The patient had all the usual symptoms of intestinal obstruction without, however, any localizing symptoms. Nothing was discoverable on palpation and rectal examination. The patient continued in this condition, with some slight amelioration alternating with exacerbations, for eleven weeks, existing, upon the average, on not over 3 ounces of milk a day. At the end of that time the author found the patient in a state of collapse, with great pain and straining. A hard mass was felt blocking the rectum; it was removed by pressure through the posterior vaginal wall, and proved to be a gall-stone the size of a pigeon's egg, facetted and weighing 5 drachms 41 $^1/_2$ grains. The patient recovered slowly, but completely.

John Thomson[12] records the case of a male child who became jaundiced two days after birth, got steadily weaker, and died on the twentieth day. The urine was brown; the motions yellow, the later

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[9] Johns Hopkins Hosp. Bull., Feb., '97.
[10] Lancet, May 15, '97.
[11] Brit. Med. Jour., Feb. 13, '97.
[12] Edinburgh Hosp. Reports, vol. v.

green, but never clay-colored. There was no ordinary meconium, but yellow matter like ochre was passed. At the necropsy no abnormality of the bile-ducts was noticed; the liver was normal to the naked eye, but microscopically showed commencing cirrhosis and some fatty infiltration. The gall-bladder contained one calculus weighing 25 milligrammes, which was elongated and constricted in the middle, a smaller one, and several fragments. Their combined weight when dried was 30 milligrammes. Their composition showed biliverdin and traces of cholesterin. The author has collected six other cases with biliary calculi in which jaundice was present either at or immediately after birth. In all death occurred within one month.

Diagnosis.—A. H. Ferguson[13] states that the diagnosis of occlusion to the ductus choledochus is not difficult, in the majority of cases, the chief clinical features being: 1. The history of cholelithiasis. 2. Pain (*a*) referred; (*b*) local, over the common duct. 3. Tenderness elicited by finger-tip pressure is not over the fundus of the gall-bladder, unless it, too, contains stones or is inflamed. 4. Jaundice is the sign of an obstructed common duct; chronic exacerbating jaundice is more characteristic of obstruction by a gall-stone loose in the duct than anything else. 5. Area of gall-bladder dullness lessened in chronic cases and increased in acute obstruction in a case that has had manifestations of cholelithiasis for a short time. The author believes that in every case of biliary colic the gall-bladder enlarges during the first attacks. 6. Several slight attacks within a day or week, coupled with icterus, is strong evidence of choledochus-stone. 7. Vomiting may or may not be present; nausea usually is. 8. Emaciation is a late sign of this trouble 9. Chills and fever in 25 per cent. of cases (Courvoisier).

Osler[14] says that the condition of ball-valve stone in the common duct is recognized from malaria by absence of plasmodium in the blood. Abscess of liver is excluded by the absence of tenderness and enlargement, the variable character of the jaundice, the good condition of the patient in the intervals. If suppurative cholangitis is present it is recognized by (1) increased tenderness in the hepatic region, with possibly enlargement of the gall-bladder; (2) the more frequent return of the paroxysms, and often the irregularly remittent form of fever; (3) jaundice less intense in the suppuration, and an absence of the increase of jaundice after a paroxysm; (4) the condition of the patient between the paroxysms is much worse in the suppuration than in the ball-valve condition.

The presence of a solitary calculus in the gall-bladder is rather the exception than the rule; Steinthal[15] encountered such a condition in three cases, the stones being about the size of a pigeon's egg. When attacks of colic referred to the region of the gall-bladder are unattended with jaundice, and there is no history of a stone's having been passed by the bowel, it is safe to assume that a solitary stone is lodged in a diverticulum of the bladder; if such attacks are followed by the passage of a large stone there must be a communication between the gall-bladder and the bowel. Attacks of colic, with or without jaundice, when no stone has been passed, indicate the presence either of a solitary stone or of one large stone causing obstruction, and a number of smaller ones; elevation of temperature,

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[13] Tri-State Med. Jour. and Pract., April, '97.
[14] Lancet, May 15, '97.
[15] Deutsche med. Woch., March 31, '98.

complicating colicky attacks, is an indication of suppuration.

Etiology.—William Hunter[16] points out that the female sex is five times more liable to cholelithiasis than the male. Any cause of stagnation of bile in the gall-bladder favors the development of this condition. Schroeder found gall-stones in 50 per cent. of cases of women whose livers showed evidence of tight-lacing by the presence of transverse furrows. It is not unreasonable to remark that the presence of transverse hepatic furrows is by no means conclusive evidence of tight-lacing, and that after a large experience of post-mortem examinations the conclusion is forced on the observer that such furrows occur in cases in which tight-lacing has certainly not been customary. They occur also in the bodies of men. The chief seat of the formation of gall-stones is the gall-bladder, and their chief constituent in this situation is cholesterin, though they usually have a central dark nucleus of bilirubin-calcium. Gall-stones are also formed within the intrahepatic ducts, and here consist almost always of bilirubin-calcium. In the hepatic and the common bile ducts gall-stones are also formed; in these situations they consist of cholesterin and bilirubin-calcium, the latter being in excess of the former. The author regards the cholesterin as being formed locally through the disintegration of the epithelium lining the gall-bladder and larger bile-ducts. Naunyn has traced the origin of cholesterin from this degenerated epithelium. It is formed within the degenerated epithelial cell, and escapes in a viscous condition. Bilirubin-calcium is insoluble, and in normal bile the two constituents are uncombined. The presence of an excess of lime causes bilirubin-calcium to be deposited. It would seem that the normal bile-salts prevent the precipitation of bilirubin-calcium, even in presence of an excess of lime. So that a certain reaction of normal bile must ensue in order that bilirubin-calcium may be precipitated. Naunyn has observed that egg-albumin favors the precipitation of bilirubin-calcium from bile-salts. The view of the author is that catarrh of the gall-bladder and of the bile-ducts is the chief cause of the precipitation of cholesterin and of bilirubin-calcium. In catarrh there is the presence of albumin in connection with increased epithelial degeneration, and these are just the conditions which have been shown to be most congenial to the formation of gall-stones.

One of the commonest causes of inflammation of the ducts and gall-bladder is infection by organisms. To this cause must be added stagnation of bile, these two conditions combined being the most efficient causes of gall-stones. The bacillus coli communis is the organism most frequently found in inflammation of the ducts and gall-bladder. But, in addition to infection and stagnation of bile as causes of catarrh, catarrh of the ducts may be set up by excretion through the bile itself of irritating products.

According to R. H. Chittenden[17] calculi in man are composed chiefly of cholesterin, with pigment and calcium, or the so-called "mixed cholesterin calculi." The nucleus is usually composed of an insoluble compound of bilirubin, with calcium-salts. In studying the formation of gall-stones there are three factors to be considered, namely: cholesterin, bile-pigment, and calcium-salts, all of which are normal constituents of bile. Cholesterin is held in solution by sodium glycocholate and taurocholate,

[16] Brit. Med. Jour., Oct. 30, '97.

[17] Med. News, May 1, '97.

and only when it reaches a point of concentration, exceeding one-tenth the weight of the bile-salt, is it separated or crystallized. Bile in the gall-bladder contains a larger percentage of cholesterin than does liver-bile.

Retention of bile in the gall-bladder, by increasing concentration of the fluid, leads to a proportionate increase in the percentage of cholesterin. It is, therefore, easily understood that stagnation of the bile in the gall-bladder predisposes to the formation of biliary calculi. As to the origin of cholesterin, Chittenden disagrees with Naunyn, who attributes their origin solely to perverted metabolism in the epithelial cells lining the gall-bladder. While this may be true of the cholesterin in gall-stones, it is not true of the cholesterin in normal bile. He regards it purely as a genuine waste-product excreted by all the cells of the body, the liver included, and eliminated unchanged, not only through the bile, but through the fæces, skin, and milk as well. This perversion of metabolism is believed to be the result of a catarrhal process caused, perhaps, by the bacillus coli communis, which has migrated from the intestinal tract. The origin of the nuclei of biliary calculi, which is usually calcium-bilirubin, an insoluble compound, is next considered. It is known that, though the bile-pigments are held in solution by the alkali salt of the bile-acids, they are precipitated in the presence of an excess of calcium-salts. Since it is known that the amount of calcium-salts ingested in food bears no relation to the amount contained in bile, the explanation for this excess must be looked for elsewhere, and the writer sums it up as follows: The disposition of calcium-bilirubin must be connected with pathological changes, as a result of which the normal calcium of the bile must be transferred into insoluble compounds, or else, as appears quite probable, there is an increased secretion of calcium from the epithelial cells of the mucous membrane, by which the formation of insoluble compounds is facilitated.

Hartmann[18] describes the work undertaken by his pupil, M. Mignot, for the purpose of determining the pathogenesis of biliary calculus. The calculi and bile from 5 patients were examined bacteriologically; both were found sterile in 2 cases; in 1 case the bacillus coli was found in both bile and calculus; in 1 case the bacillus coli was found in the calculus, with the bacillus and streptococci in the bile; in 1 case the bile was sterile, but the bacillus coli was found in the centre of the calculus. The formation of calculi was produced in animals by inoculation with the bacillus coli which had been attenuated by prolonged culture in bile mixed with bouillon. To produce calculi experimentally an extremely attenuated infection was found necessary, together with relative inertia of the gall-bladder, which prevents premature expulsion of the cholesterin crystals. The introduction of aseptic foreign bodies into the gall-bladder did not produce sufficient irritation to determine the production of calculi, and the same is true of stagnation of bile.

J. Cornillon[19] has found that an intimate relationship exists between the uterine functions and biliary disorders. If a menstruating woman complains of nausea and pains in the back and right hypochondrium, if the uterus and adnexa are healthy, cholelithiasis should be thought of, even if no icterus is noticeable. The author believes this condition not explicable on reflex grounds, but

[18] Presse Méd., March 2, '98.
[19] Le Progrès Méd., '97.

to be the direct consequence of the hyperæmia of the abdominal viscera attendant on the menstrual nisus. On the other hand, the presence of gall-stones may exert an untoward influence on the catamenial discharge, attacks of biliary colic interfering with the regularity of the periods. During pregnancy and while nursing the attacks of colic are decreased in frequency only to return with renewed violence after weaning. At the menopause hepatic colic is often accompanied by uterine hæmorrhage, and, finally, operation on the uterus seems to predispose to biliary difficulties or to induce the recurrence of former attacks.

Treatment.—During an acute attack of gall-stone colic W. Gilman Thompson[20] thinks from $^1/_4$ to $^1/_2$ grain of morphine with $^1/_{100}$ grain of atropine should be injected at once, preferably in the hepatic region, and from 15 to 30 minims of spirit of chloroform should be administered in cherry-laurel water, either alone or with 1 drachm of Hoffman's anodyne. A large, very hot flaxseed poultice should meanwhile be applied over the region of the gall-bladder and maintained there for several hours. If the pain admits of the patient's being moved into a bath-tub, complete immersion of the body in water at 104° or 106° F. is often soothing. Should these measures fail, the production of the first stage of chloroform narcosis, as in labor, is indicated.

Between the attacks a long course of Carlsbad water, or sodium phosphate, or carbonate, and of belladonna and chloroform, is of value. Two ounces to half a pint of olive-oil given daily on an empty stomach has undoubtedly been accompanied in certain cases by the passage of definite facetted gall-stones.

Brockbank[21] gives the following advice as to treatment: Warm water in large quantity certainly relieves the pain of biliary colic, and the effect is increased by the addition of a little bicarbonate of sodium. Much good is often done by the administration of olive-oil, and a tablespoonful of brandy to about 6 ounces of oil. The dose varies from 2 or 3 to 20 ounces a day, according to the amount the patient can stand. If it cannot be taken by the mouth 10 ounces by the rectum will often be beneficial.

Blum[22] draws attention to the value of large olive-oil injections in the treatment of biliary colic. These rectal injections can be substituted for the large doses of olive-oil given by the mouth, to which patients often object, and which may disturb the functions of the stomach. The author follows Fleiner's directions in giving these large enemata: 1 pint of pure warm oil is introduced, at first daily, and subsequently at longer intervals.

Mayo Robson[23] says that surgical help is to be sought:—

1. In frequently-recurring biliary colic without jaundice, with or without enlargement of the gall-bladder.

2. In enlargement of the gall-bladder without jaundice, even if unaccompanied by great pain.

3. In persistent jaundice ushered in by pain, and where recurring pains, with or without ague-like paroxysms, render it probable that the cause is gall-stones in the common duct.

4. In empyema of the gall-bladder.

5. In peritonitis starting in the right hypochondrium.

6. In abscess around the gall-bladder

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[20] Med. News, April 29, '97.

[21] University Med. Mag., Sept., '97.

[22] Münch. med. Woch.; Indian Lancet, Nov. 16, '97.

[23] Brit. Med. Jour., March 27, '97.

or bile-ducts, whether in the liver or under or over it.

7. In some cases where, although the gall-stones may have passed, adhesions remain, and prove a source of pain and illness.

8. In fistula, mucous, muco-purulent, or biliary.

9. In certain cases of chronic jaundice, with distended gall-bladder dependent on some obstruction in the common duct, although the suspicion of malignancy be entertained. In such cases the increased risk must be borne in mind, as malignant disease may be the cause of the obstruction, and operation in such cases is attended with greater danger than ordinary.

10. In phlegmonous cholecystitis and in gangrene, if the case be seen and recognized at a sufficiently early stage of the disease.

For the treatment of stone in the common duct, whether impacted or loose, which cannot be extracted through the cystic duct and gall-bladder, Ferguson[24] advises choledocholithotomy as the ideal surgical procedure.

In the majority of gall-stone cases causing obstruction of the common duct there are also stones in the cystic duct and gall-bladder; then cholecystotomy should be the operation of choice.

The author recommends the following technique: 1. Oblique incision when the gall-bladder is contracted. 2. Adhesions should be carefully separated in the line of search for stones and nowhere else. The fundus of the gall-bladder being found, it is followed on the under surface of this organ to the cystic and common ducts. The adhesions are cautiously cleared away along this route, but any that may be shutting off the general peritoneal cavity should be left alone. When the foramen of Winslow is reached the gastro-hepatic omentum is palpated, for in it courses the ductus choledochus. If the adhesions are dealt with as above described the subsequent drainage is easier and more efficient. 3. Incision of the duct is done longitudinally over the anterior surface of the stone. 4. Test the patency of duct by probe or water-test. 5. Suturing the duct is not at all essential for success, and may be harmful by (*a*) prolonging the operation and (*b*) by injuring the wall of a pathological duct that does not hold sutures. 6. Drainage, both tube and gauze, should be used.

GASTRIC ULCER.

Diagnosis. — W. Essex Wynter[25] divides gastric ulcer into three distinct clinical aspects.

The commonest form, occurring in anæmic women of 20-30 years of age, is associated with previous symptoms of dyspepsia of only moderate intensity, but attended on one or more occasions with hæmatemesis, which may be slight or of sufficient intensity to produce faintness and collapse.

This type is scarcely ever fatal; it is limited to young anæmic women, and furnishes something like 90 per cent. of all the cases diagnosed as gastric ulcer.

The next type is chronic ulcer. This occurs, for the most part, in middle life, and affects the two sexes with greater impartiality, though there is still a predominance of females. These cases are only a tenth as numerous as those already referred to, but their long duration and persistent attempts to obtain relief makes them appear less rare. The physiognomy is very striking—wasting, anæmia, and pain being plainly written

[24] Tri-State Med. Jour and Pract., April, '97.
[25] Treatment, Dec. 23, '97.

on the features. The history of illness is usually a long one, extending over many years, and marked by continuous pain, repeated vomiting, and several attacks of hæmatemesis, sometimes trifling, sometimes severe. The pain commences, or is increased, on taking food, and becomes more and more intense as digestion with increasing acidity of the gastric contents proceeds, until it culminates in vomiting. The hæmatemesis occurs, for the most part, at the same times, but less frequently, though, in nearly all the occasions of vomiting, blood can be detected by the microscope or chemical tests even when not apparent to the naked eye.

The pain of gastric ulcer is especially excited by tea, alcohol, condiments, hot food or drink, and by the passage of a constant galvanic current. This is of use in distinguishing between ulcer and simple neuralgia of the stomach, where these relieve pain.

The ulcer tends to occur with greater frequency toward the lesser curvature and the posterior wall of the stomach.

Some indication of the position of an ulcer is occasionally afforded by the position in which the patient finds greatest ease from pain. It is usually such that the raw surface is above the level of the fluid and acid contents of the viscus.

The diagnostic value of pain, vomiting, and hæmatemesis consists largely in their close relation to the ingestion of food in gastric ulcer. In gastrodynia the pain is often more intense when the stomach is empty.

A very important indication of the existence and even of the position of a gastric ulcer is the presence of tenderness over the lesion when pressure is made on the abdominal wall. The symptoms and aspect of the subject of chronic ulcer are so very like those associated with cancer, and the period of life so overlaps, that the distinction between the two is difficult and often impossible.

The third class embraces the cases in which perforation of the stomach-wall occurs, often as the first observable evidence of disease, though investigation may elicit a history of vague discomfort for a few days preceding the rupture.

There is a sensation of something's giving way in the upper abdomen, with the sudden onset of acute pain in the same region and the supervention of collapse. Vomiting or retching commonly occurs, and very soon peritonitis is established, with contraction and immobility of the abdominal muscles, including the diaphragm, and perhaps hiccough. In favorable cases the peritonitis may be strictly limited to the area around the perforation, leading to spontaneous cure, or it may be general and lead to death in a few hours or days. In addition to the sudden pain, collapse, and peritonitis, with rising temperature and small hard pulse, there are two other very characteristic signs of perforation. These are the cessation of vomiting, though spasmodic efforts may continue, and the distension of the abdomen with escaped gas, leading to the abolition of the hepatic and splenic dullness.

In hæmatemesis A. Robin[26] gives, as the reliable signs for the gastric origin of blood, the occurrence of melæna, or the presence of food or lactic acid in the vomited matter, along with, though less trustworthy evidence, the subjective feelings of the patient at the time, provided always that the examination of the lungs, mouth, and pharynx precludes the possibility of blood coming from these parts having been swallowed and then expelled from the stomach. Very copious

[26] Medico-Chir. Centralb., No. 10, '97.

hæmatemesis generally arises from a gastric ulcer, but the possible rupture of an aneurism into the stomach must be kept in mind, although this is usually preceded by smaller premonitory hæmorrhages. The previous history of the case is most important. In eighty out of a hundred cases large hæmorrhages arise from gastric ulcers. In some, however, the source of the blood may be an œsophageal or a duodenal ulcer, but this is very rare.

More common causes are cancer of the stomach, alcoholic cirrhosis of the liver, and hysteria. If the presence of a gastric ulcer or cancer can be disproved, hæmorrhage owed to vicarious menstruation or to varicose vessels may be suspected. Varicosity of veins in the œsophagus and the rupture of miliary aneurisms in the stomach-wall may be cited as pathological curiosities from which hæmatemesis has been caused. Hæmorrhage also occurs during the course of certain infectious diseases. The hæmatemesis of uræmia is due to congestion of the stomach-walls.

Vogel[27] calls attention to the fact that, while performing post-mortem examinations in children, and especially among the newly born, small superficial and multiple ulcerations of the gastric mucous membrane are frequently met with. Occasionally hæmorrhagic erosions are found.

These erosions are scattered over the mucous membrane of the stomach, and are distinguished by their irregular borders, their blackish centre, and by the numerous spots of ecchymosis which accompany them. At other times one meets with those little ulcerations of the gastric follicles to which Billard has assigned so important a rôle in the pathology of melæna neonatorum.

Cases of perforating ulcer in children are so rare as to make the following case particularly interesting. The child, 2 months old, had suffered for a month from diarrhœa and vomiting. The vomiting was continuous, the vomited matter being of a greenish color. The abdomen became tympanitic, and the child gradually sank from exhaustion. On opening the abdomen a pouch shut off from the rest of the peritoneum was observed, containing a very acid yellow fluid in considerable quantity, situated behind a fold of omentum. This pouch was bounded above by the posterior surface of the stomach and the inferior aspect of the liver, behind by the pancreas, and below by the transverse colon. On the posterior wall of the stomach toward the smaller curvature, and in the neighborhood of the pylorus, a perforating round ulcer was detected, having clean, sharply-cut edges, and being about the size of a fifty-centime piece. The stomach contained a fluid similar to the contents of the pouch by which it was connected by means of the perforation. No other lesion of the gastric mucous membrane existed, nor was anything else abnormal found in the abdomen.

Kuttner[28] reports a case of ulcer in which pain in the epigastrium came on acutely and was associated with obstinate constipation. Enemata of oil relieved both symptoms temporarily; but the pain recurring, associated with resistance in the epigastric region, operation was performed, and an abscess was found in the liver, through which gastric contents were discharged. At the autopsy an ulcer was found on the posterior wall of the stomach, perforating into the liver.

Dieulafoy[29] remarks that, in the pres-

[27] Rev. Mens. d. Mal. de l'Enf., Feb., '98.
[28] Brit. Med. Jour., May 29, '97.
[29] Presse Méd., July 25, '97.

ence of a sudden attack of peritonitis, the physician should not attribute it only to appendicitis, salpingitis, intestinal perforation, or perforations of the biliary tracts, but to perforations of the stomach as well, although there may be no history of previous gastric troubles.

Etiology.—Lyman[30] mentions, as predisposing causes of gastric ulcer, the conjunction of local injuries with general diseases, such as chlorosis, tuberculosis, and syphilis, which tend to produce fatty or amyloid degeneration of the arterial walls in the gastric mucous membrane. The local injury may result from a blow or pressure from without, and from fragments of bones or other hard bodies with sharp angles introduced with the food. Such injuries in a healthy person will only cause slight temporary erosions, such as are common in catarrhal inflammation. In persons with a disturbance of the healthy circulation in the mucous membrane points will be left insufficiently supplied with blood to withstand the eroding action of the acid gastric juice, should even a small local injury afford the means for its direct action on the tissues. Thus the true gastric ulcer is not surrounded by inflammation; the surrounding tissue is sufficiently supplied with blood to withstand the acid and pepsin, while the great majority of these ulcers are found in the part of the stomach-wall which remains in contact with the fluid contents during the whole of each digestive act.

Widal and Meslay[31] assert that in endeavoring to settle the infectious origin of ulcers we cannot depend on the finding of the pathogenic micro-organism, for the latter is only discoverable in the beginning stages, in the region of the specific ulcer; when the round ulcer has once formed, the organisms are no longer found,—the ulcer has lost all signs of its specific etiology.

Prognosis.—According to an editorial,[32] the probability of a gastric ulcer's perforating the stomach-wall depends upon its situation mainly. An ulcer on the anterior surface of the stomach will almost certainly lead to perforation if the ulcerative process continues; but should the ulcer be situated on the posterior wall adhesions form very readily, so that the stomach becomes adherent to the diaphragm or to the left lobe of the liver. Perforation of the diaphragm by a gastric ulcer is decidedly a rare occurrence, and even when it does occur the pleura is much more frequently affected than the pericardium. Of twenty-eight cases of perforation of the diaphragm by gastric ulcers collected by Ludwig Pick, only ten were cases in which the ulceration had perforated the pericardium.

The duration of life after perforation of the stomach, says Morse,[33] may be estimated at twenty-four hours; hence the importance of early and distinct diagnosis cannot be exaggerated. The shock following perforation is severe, and its effect can be observed to increase so rapidly that it is apparent the chances of success are diminishing in direct proportion to the length of time that is allowed to elapse between the occurrence of the injury and its repair by surgical means.

Treatment. — Fourrier's[34] method of treating ulcerative conditions of the stomach is by introducing through a stomach-tube 2 $^1/_2$ or 3 drachms of subnitrate of bismuth, suspended in 15

[30] Jour. Amer. Med. Assoc., March 13, '97.
[31] La Sémaine Méd., March 17, '97.
[32] Lancet, Aug. 28, '97.
[33] Brit. Med. Jour., Feb. 13, '97.
[34] Indian Lancet, Nov. 16, '97.

ounces of water. Before doing this any food or mucus is cleared out by washing with a solution of bicarbonate of soda. The bismuth and water is rapidly introduced and allowed to remain for ten minutes, the tube being removed. The bismuth is thus allowed time to deposit on the inflamed and ulcerated mucous membrane, and the water is then carefully withdrawn and should come away clear, leaving the salt behind. Marked success obtained with the method in gastric ulcer in chlorotic girls.

Olivetti[35] says that large doses of bismuth, 9 to 10 $^1/_2$ ounces a day, given in hyperacidity and ulcer of the stomach; single doses, 2 $^1/_2$ to 4 drachms, were well borne. By the means of test-breakfasts the author found that the bismuth has no influence either on the production of hydrochloric acid or on the contractility of the stomach. The favorable action of bismuth in hyperacidity and in ulcus ventriculi is therefore a purely mechanical one; the bismuth forms a protective layer all over the mucous membrane of the stomach and thus prevents the sensitive parts from coming in direct contact with the hydrochloric acid.

Fremont[36] regards gastric hyperacidity as the principal causative factor. The first indication is to relieve the gastric juice of its digestive activity. For this two methods, which are readily combined, present themselves: Milk fixes the hydrochloric acid; the alkalies neutralize it. The neutralized juice does not digest. The second indication is to cover the surface of the ulcer so as to prevent contact with the gastric juice. To neutralize a fluid which is constantly being secreted, frequent doses are necessary. For instance, 2 or 3 tablespoonfuls of warm (100.4° F.) milk are given every thirty minutes for twenty consecutive hours, to which 1 grain of calcined magnesia, 1 grain of prepared chalk, 2 grains of bismuth subnitrate, and 4 grains of sodium bicarbonate are added. During the remaining four hours of the night this dose is given every hour. The amount may even be increased if the pain is not relieved. If there is repeated hæmorrhage, ice should not be given internally, but an ice-bag upon the stomach is beneficial.

Winternitz[37] states that the form of a round ulcer of the stomach seems to show that the nervous system has a part in its development, as is the case with perforating ulcer of the plantar region. The object of hydrotherapy in these conditions is to cause the spasms of the vessels of the mucous membrane of the stomach to disappear. For this purpose baths (at 50° to 54° F.), and of three to five minutes' duration, are given, and applications of cold cloths upon the abdomen, or a cold-water coil upon the cardiac region. The symptoms which yield most easily to this treatment are cardialgia and hæmatemesis. It is better to introduce cold fluid into the rectum, a measure which will reduce the intragastric temperature, and produce an intense contraction of the gastric vessels. This contraction is only for a short time, but it will often continue long enough to stop the bleeding. To make it even more certain pieces of ice may be introduced into the rectum.

Leube[38] extols the advantages of the medicinal and dietetic treatment of ulcer of the stomach. In a large proportion of cases treated by the author's method —which consists in rest, low diet, and hot external applications—complete and

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[35] Gaz. Med. de Torino, No. 48, '97.
[36] Bull. Gén. de Thér., 23e liv., p. 909, '98.
[37] Blat. f. klin. Hydrother., May, '98.
[38] Centralb. f. Chir., No. 28, '97.

permanent cure has been effected in the course of three or four weeks. In some few cases, however (about 4 per cent.), it will be found advisable to apply for aid of the surgeon.

Surgical intervention is positively indicated in cases of small, but frequently repeated, hæmorrhages from the stomach. A single attack of profuse bleeding is not regarded as an indication for operation. Profuse hæmatemesis, unless caused by the erosion of a coronary artery, seldom causes death. Operative treatment, especially the performance of gastro-enterostomy, is indicated in cases of gastric ulcer, in which intense pain and frequent vomiting lead to the diagnosis of spasmodic stenosis of the pylorus. When these symptoms do not yield to rest and medical treatment, and the patient is threatened with death from inanition, the surgeon should be called in at once.

J. Mikulicz[39] thinks that the danger to life in which a patient with a gastric ulcer finds himself is, to say the least, no less, and probably is greater, than the danger which the patient incurs in submitting to an appropriate and properly executed operation. Surgical treatment of uncomplicated gastric ulcer is to be adopted if phenomena appear which directly or indirectly threaten the patient's life (frequent hæmorrhages, increasing emaciation, beginning purulent perigastritis, suspicion of carcinoma), and if repeated internal treatment gives either no result or one only of short duration, and the patient, through pain, vomiting, or dyspepsia, is seriously affected in his ability to work or to enjoy life.

MOVABLE KIDNEY.

Symptoms.—Lewis[40] states that the symptoms of movable kidney are very variable. In most cases they are quite pronounced, but the condition frequently does exist with absolutely no symptoms at all. These are general exceptions, however, and the local, reflex, and general symptoms which are usually manifested by a movable kidney are quite marked. Pain is the most constant symptom, occurring as a dull, constant ache in the back and lumbar region. After violent exercise, severe labor, long riding or dancing, this dull ache sometimes becomes excruciatingly sharp and lancinating, shooting down into the groin, and in the male occasionally causing retraction of the testicle. In the female the occurrence of the menstrual epoch seems to excite the pain of movable kidney, and such pain is often mistaken for that of dysmenorrhœa.

The nervous symptoms of renal mobility are manifold, being largely reflex in their origin. Irregular action of the heart and headache are the most prominent and frequent of these, but gastric and intestinal indigestion, constipation, menstrual disorders, and countless aches and pains can all be mentioned as common manifestations of the condition. The headache is many times quite severe and referred by the patient to the top of the head. The general symptoms are also nervous in origin, and vary in degree from slight neurasthenia to deepest melancholia or hysteria.

Einhorn[41] gives the symptoms of movable kidney as follows:—

1. A feeling of traction and weight in the abdomen.

2. Quite violent palpitation in the epigastrium (pulsation of the abdominal aorta).

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[39] Centralb. f. Chir., July 17, '97.
[40] N. Y. Med. Jour., April 23, '98.
[41] Med. Rec., Aug. 13, '98.

3. Disturbances are usually more pronounced when standing or walking, and disappear on lying down.

4. Frequent urination, occasionally attended with slight burning.

5. Pains in the sacral region after slight exertion.

6. In women the discomfort is usually increased at the time of menstruation, and considerable improvement manifests itself during pregnancy.

These six symptoms need not always be present; they may all be absent, or occur separately.

Most of the gastric and intestinal symptoms, such as pains, eructations, nausea, occasional vomiting, irregularity of the bowels (chiefly constipation, sometimes diarrhœa), which are present in persons with movable kidney, occur usually independently of the latter. Gastric neuroses, which originate by reflex action from a movable kidney, are met with, but rarely; among them are nervous vomiting and nausea. That cases of periodic attacks of continued gastro-succorrhœa can be regarded as reflex symptoms of a movable kidney appears doubtful.

Cordier[42] deduces the following propositions: 1. A movable kidney often produces a dilated stomach, with all the accompanying symptoms of a disease of the latter. 2. It is a fruitful source of gall-stones, by the pedicle's producing a partial obstruction of the common duct. 3. The bending of the ureter often gives rise to a hydronephrosis. This, in turn, is sometimes converted into a pyonephrosis. 4. It may produce death by a complete strangulation by a torsion of the vessels and ureter. 5. By dragging on the abdominal aorta and kinking of the vena cava, a condition simulating an aneurism of these vessels may be produced. 6. Pain referred to the region of distribution of the spinal nerves is often induced by a movable kidney's disturbance of the abdominal basin. 7. A general nerve-exhaustion (neurasthenia) is frequently induced by this condition's interfering with digestion, assimilation, and elimination.

Leonard A. Bidwell[43] mentions two different forms of movable kidney. In the first variety the organ is freely mobile and forms a definite abdominal tumor, the term "floating kidney" being used for this condition; in the second variety the organ can be displaced only to a small extent and the affection is called "dislocated kidney." The symptoms of these two forms vary considerably and it is often found that they are more severe in the cases where the displacement of the kidney is least marked; in some cases of floating kidney the accidental detection of an abdominal tumor has alone drawn attention to the condition.

Movable kidney was at one time considered to be a rare affection, but some German statistics, made after examination of a large number of patients in several hospitals, show that some degree of mobility of the kidney is present in about 1 in 250 patients, although in a great number of cases the patients do not suffer inconvenience from this mobility. The right kidney is affected much more frequently than the left and the proportion is stated to be 11 to 1. The symptoms usually complained of are pain of a dragging nature in the loin and considerable tenderness over the kidney. In some cases there may be symptoms resembling those of renal colic. This may be accompanied by in-

[42] Amer. Jour. of Obstet. and Gynec.; Canada Lancet, July, '98.

[43] Lancet, April 16, '98.

creased frequency of micturition and sometimes even by alteration in the urine itself. These latter symptoms are met with more frequently in cases of dislocated kidney and are probably due to a kink of the ureter which produces obstruction of that duct. We also find other symptoms in connection with this condition, such as severe digestive disturbances, especially pain and vomiting; these crises may resemble gall-stone colic, and the gall-bladder has more than once been explored for attacks in reality due to floating kidney. Very severe attacks of migraine are also sometimes associated with floating kidney.

Diagnosis.—According to Lewis,[44] the diagnosis of renal mobility is not always easy. The history, however, of pain in one or both sides of the abdomen, a dragging sensation in the back, increased by exercise, together with pronounced reflex symptoms, should always prompt an investigation of the kidneys and their position.

The examination is best conducted by Israel's method of counter-pressure, with the patient in the dorsal position. The bowels should previously have been freely moved in order to remove any fæcal accumulation which might be mistaken for the renal tumor. The clothes are completely loosened and removed sufficiently to expose the whole abdomen.

One hand is placed over the hypochondriac region, the other on the back opposite the normal position of the kidney, just below the last rib. Then, while deep pressure is made by the hand in front and counter-pressure by the one behind, the whole side should be palpated, the patient at the same time being told to breathe naturally, flex the limbs, and relax the muscles of the abdomen as much as possible. The kidney is usually found as a distinct, renal-shaped body, quite sensitive to the touch, and giving rise to a peculiar sickening pain on pressure. Failing to determine the location of the kidney in the dorsal position, the hands should be placed as before and the patient examined while standing with the body bent forward over a chair. Still another way is to have the patient assume the knee-elbow position, and this way may prove the most satisfactory after all.

Wandering or moving spleens may be mistaken for renal mobility, and Morris has demonstrated the fact that tumors of the gall-bladder are extremely difficult to differentiate from movable kidney.

Etiology.—H. Edwin Lewis[45] regards movable kidneys as of two varieties, congenital and acquired.

The congenital movable kidney is commonly spoken of as a floating kidney, since it is suspended in the abdominal cavity by a mesonephron, which completely surrounds the kidney and tethers it to the abdominal wall. The acquired form never has a mesonephron and is seldom capable of such extended motion as the floating kidney of strictly congenital form. This congenital form of movable kidney is simply an anomaly. For some reason the peritoneum, instead of only covering the anterior face, becomes reflected entirely around the kidney, and is then attached to the posterior abdominal wall. As years go by, the constant tension on the suspensory ligament or mesonephron caused by the weight of the kidney tends to draw it out and increase its length, and when the age of adult life is reached the kidney is, indeed, a floating kidney.

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[44] N. Y. Med. Jour., April 23, '98.
[45] *Ibid.*

The acquired form of movable kidney may be due to many causes, which are classified as predisposing or exciting.

The predisposing causes are chiefly sex and general emaniation. By far the greatest number of renal displacements occur in females, this greater frequency of movable kidneys in females being undoubtedly due to changes in the visceral relations attending pregnancy and tight lacing.

General emaciation, however, is the principal predisposing cause of movable kidney.

The exciting causes of renal mobility are many, depending, of course, on the subject's occupation, sex, habits, and general condition, but those most common are falls, strains, frequent pregnancies, tight lacing, enteroptosis, enlargement of the liver, and the removal of large abdominal growths.

Several other causes can produce displacements of the kidney, but it is extremely rare to trace a movable kidney to a single cause, and, as has been said before, such a condition in almost every case comes from a number of forces which together produce a common result.

Treatment.—According to Einhorn,[46] the abdominal bandage is a very valuable resource if one expects from it no more than a relief of the symptoms which result from the abnormal mobility of the kidneys (and other prolapsed abdominal organs). If, however, it is expected that this measure will at the same time remove all the existing disturbances (gastric and intestinal affections), one will meet everywhere with disappointment.

The disturbances of the stomach and intestinal canal must be treated according to the principles prevailing at the present time.

Besides a serviceable, well-fitting abdominal bandage (a cushion for the kidney can almost always be omitted), the medical treatment consists in promoting the nutrition and strengthening the organism. The former is done by a liberal diet (forced feeding), so that an increase in weight takes place. The latter is accomplished by gymnastics, by general massage, and electricity. In a few cases, after a considerable increase in flesh has occurred, the writer has observed not only a disappearance of all the subjective symptoms, but also the return of a previously movable kidney in the second or even third degree to its normal position, so that the organ could no longer be palpated.

Shall the treatment of movable kidney be surgical or are medical therapeutic measures sufficient? The writer's experiences point decidedly in favor of medical treatment. While, in general, he is opposed to operative treatment in cases of floating kidney, he believes that in rare instances nephrorrhaphy may be justifiable, especially when a connection between the symptoms (both the direct as well as the gastro-intestinal disturbances) and a movable kidney appears to be proved in a marked degree, and the above-described dietetic-mechanical methods of treatment have completely failed. At any rate, every surgeon, before advising operative intervention in movable kidney, should completely exhaust the suggestions and remedies of the physician.

In regard to treatment, Knapp[47] questions the need of treatment in mild cases. Many cases of dislocated kidney continue for years and never have a symptom to make the condition evident.

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[46] Med. Rec., August 13, '98.

[47] Zeitsch. f. Heilk., B. 17, H. 2, 3.

There, are, however, symptoms which require treatment. Mechanical support should be directed to the support of the intestines in general. He does not advocate the use of pads, etc., as such appliances do not act surely. Bandages, if employed, must be suited to the individual case. He recommends massage after the method employed by Thure-Brandt. He does not advocate operative treatment, believing it does not secure relief.

Keller[48] considers pregnancy unfavorable to the development of movable kidney, but after delivery everything tends to produce it. He advises, as prophylactic measures, the wearing of a belt tighter above than below, remaining in bed at least three weeks, not sitting up before the seventeenth day, and resorting to the sound rather than allowing efforts during urination. A belt should be worn during pregnancy if the abdomen is very much stretched and at least six weeks after delivery. Pads are useless, but very thin women may be benefited by a bandage with spring plates. The effect of nephrorrhaphy is too often transient for it to be recommended. Nephrectomy is the last resource.

The necessity for active treatment will, of course, depend upon the severity of the symptoms and also upon the condition of the kidney,—*i.e.*, whether floating or dislocated. Bidwell[49] says that in the former case, where little is complained of except the presence of a tumor, the application of a properly-fitting belt or truss will probably be all that is required.

In cases of floating kidney wnere neither a belt nor a truss can be worn, and in practically all cases of dislocated kidney, the question of operative interference must be considered. Two operations have been proposed, namely: nephrectomy and nephrorrhaphy. The first-named, however, is unnecessary and should not be undertaken except in cases of floating kidney with a distinct mesonephron, in which the whole of the kidney-substance has been destroyed by long-continued hydronephrosis. In all other cases the operation of nephrorrhaphy should be performed.

Cordier[50] says that nephrorrhaphy is a safe and effective surgical procedure. All cases of movable kidney, if accompanied by symptoms pointing to the kidney as the source, should be operated upon.

Cramer[51] states that extirpation of the affected kidney in cases of advanced and extensive hydronephrosis is a difficult operation, owing to the absorption of perirenal fat and firm adhesions of the sac.

R. Harvey Reed[52] calls attention to the futility of attempting to replace a kidney in its natural position and hold it there by means of a tight bandage. The bandage could not be made tight enough to effect this object without interfering with the circulation. He uses the abdominal incision over the normal position of the kidney. The incision is made just large enough to introduce the fingers into the cavity and push the intestines to one side, so as to give a clear field for observation. A long, curved needle, with a strong handle, and armed with one thread of silk, kangaroo-tendon, or other material, is passed through the upper border of the kidney between the eleventh and twelfth ribs, and on through the muscular wall out to the

[48] Monats. f. Geb. u. Gyn., Jan., '98.

[49] Lancet, April 16, '98.

[50] Amer. Jour. of Obstet. and Gynec.; Canada Lancet, July, '98.

[51] Centralb. f. Chir., No. 21, '97.

[52] Med. Rec., July 17, '97.

back. The needle is unthreaded and withdrawn. The other end is threaded and introduced at a short distance from the point traversed by the first; the threads are then tied over a piece of gauze in a manner similar to the fastening of a staple-stitch. The sutures are left in for from ten to fourteen days.

Lewis[53] affirms that the only means which promise permanent relief to the symptoms resulting from movable kidney are those which belong to the domain of surgery. Nephrorrhaphy is the operation most often to be employed.

Nephrectomy is rarely necessary and should only be employed in those extreme cases in which the kidney is so far diseased as to be entirely useless and an irremediable source of danger to the patient if left in the abdominal cavity.

PRURITUS.

Etiology.—Sarbo[54] records two cases of pruritus in general paralysis. Both belonged to the class of cases in which no other skin-change precedes the irritation, which was, moreover, on each occasion at first local, and not general. The nervous system can act in two ways in the causation of pruritus, either, as in the case of pregnancy, completing the arc of a reflex action or producing the irritation as a symptom of its own disease. The skin-symptoms in general paralysis differ from those in tabes and other affections of peripheral nerves in three respects: they lead to violent scratching instead of mere rubbing, they are not associated with trophic cutaneous lesions, and they are eventually general and not localized. With the extinction of the functions of the cortex during the progress of the disease the pruritus disappears as well. The author concludes that pruritus without accompanying skin-changes may be a prodromal symptom of general paralysis, and that it diminishes, and eventually disappears, with the progress of mental decay.

Herman[55] makes the following division of cases of pruritus vulvæ:—

1. Adventitious, due to dirt, pediculi, worms, or pessaries.

2. Skin diseases: eczema, herpes, furuncle, or follicular, urticarial, and diabetic dermatitis.

3. Irritating discharges, such as gonorrhœa, cancer, senile endometritis; also cases in which no visible discharge is apparent.

4. Venous congestion due to heart, liver, and lung diseases.

5. Nervous affections.

According to William Murrell[56] in exceptional cases both opium and morphine produce a rash accompanied by intense itching. The "pruritus opii" has been frequently noticed, and is described as an annoying and unbearable affection. The rash presents a scarlatinoid appearance, and even the mouth and throat may be attacked by erythematous inflammation.

Prognosis.—Dirner[57] admits that the diabetic variety of pruritus is curable; so is that form of pruritus due to microbes in vaginal or cervical secretion. The intractable cases are clinically and pathologically primary. They represent subacute inflammation of the vulvar integument and fibrosis of the Pacinian corpuscles and other delicate structures. Dissecting of the skin involved in this morbid process, "vulvitis pruriginosa," alone effects a cure.

Treatment.—In a series of experi-

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[53] N. Y. Med. Jour., April 23, '98.
[54] Pester Med.-Chir. Presse, No. 37, '97.
[55] Brit. Med. Jour., Nov. 20, '97.
[56] Manual of Pharmacology and Ther., p. 296.
[57] Centralb. f. Gynäk., No. 5, '97.

ments at St. Luke's Hospital, Paris,[58] to determine what will cure itch in the shortest time, forty-one different preparations were employed. Of these the following ointment cured in the smallest number of days:—

Sublimated sulphur, 2 ounces.
Subcarbonate of potash, 1 ounce.
Adeps simplex, 8 ounces.

Ruge[59] expresses the opinion that the essential part of the local treatment is thorough disinfection of both vulva and vagina. It should be done as carefully as if a vaginal operation were to be performed. He washes, soaps, and then disinfects with sublimate solution the vulva, vagina, and cervix till all pathogenic micro-organisms have been removed; then applies to the vulva an ointment of carbolated vaselin (3 to 4 per cent.). The physician should carry out this local treatment himself, using his fingers, but not brushes or instruments, which might cause fresh lesions. The positive and immediate results are in most cases surprising. In severe as well as in mild cases, even when complicated with deep and extensive ulceration, cure is rapid. For some years he has thus treated systematically all cases of pruritus, whether leucorrhœa was present or not, with surprising results.

Fieux[60] advocates thorough local treatment of pruritus, to be undertaken by the doctor himself. A woman under his care was tormented with pruritus which caused sleeplessness, loss of appetite, and mental irritability. She did not consult anybody for a fortnight, but gave herself sublimate injections twice daily, and kept cold-water compresses on the vulva. As she became worse, she consulted the writer. He found no objective symptoms beyond superficial scratches, nor were there any traces of discharge, oxyurides, or any other parasites. He declined to prescribe any lotion or ointment, but at once practiced Ruge's antiseptic toilet of the vulva. The vulva, vagina, and cervix were thoroughly washed with soap, all folds and creases in the mucusa being opened up; then the vagina was freely washed out with a weak sublimate solution, some 16 pints being used. This process lasted a quarter of an hour, and definitely cured the patient. Ruge usually performs the "toilet" two or three times, and applies to the vulva after each sitting an ointment of carbolized vaselin. The writer saw his patient six weeks after the treatment by washing, and the pruritus had not recurred.

Herman[61] recommends:—

1. White-precipitate ointment for pediculi. For dirt, worms, or pessaries absolute cleanliness and changing of the material of the pessaries.

2. For eczema (usually affecting fat, elderly women, and those pregnant), when due to pruritic organisms, warm hip-baths, with liquor carboni detergens added, and the parts powdered with boric acid. When due to diabetes, general treatment. For follicular pruritus it is recommended to squeeze out the contents of follicles and apply corrosive sublimate, 1 to 2000.

For irritating discharges, antiseptic and sedative douches and sedative dusting-powders on the vulva, as a saturated solution of borax and solution of boric acid.

3. Pruritus, when occurring in aged women, is frequently a symptom of de-

[58] Manitoba and West Canada Lancet, Dec., '97.

[59] Zeitschr. f. Geburtshülfe u. Gynäk., B. 34, S. 355.

[60] La Gynécologie, Feb. 15, '98.

[61] Brit. Med. Jour., Nov. 20, '97.

generate changes, and treatment usually fails.

Von Mars[62] in three cases of pruritus noted that the greater labia were, probably from changes due to swelling or atrophy, in a condition of entropion, hairs being seen turned inward on the vestibule and clitoris. When the hair was carefully trimmed the pruritus at once ceased. Such treatment, of course, would be difficult to carry out for long, as the stumps of the hair soon become irritating, and the writer, therefore suggests that a thin elliptical piece of skin be excised from the outer limits of each labium majus, so as to produce an artificial ectropion of the labia.

In pruritus of the genitalia, H. Robb[63] remarks that in treating a case the main thing is to discover the cause. There should be examined (1) the external genitals for skin-eruptions; in doing this it will be well to obtain scrapings and examine them with the microscope for parasites. 2. There should next be examined the cervix for signs of leucorrhœa, and to ascertain the general condition of the uterus and appendages. 3. An examination should be made per rectum. 4. Chemical and microscopical examination of the urine should never be omitted. The presence of enlarged sebaceous glands or any signs of malignant disease should be carefully looked for. Hæmorrhoids or fissures of the anus should be treated, and the vulva should be kept free from all irritating discharges. The general health of the patient should never be forgotten. When the vulva is dry, too frequent bathing should be avoided and the surface should be kept moist, being treated, not with evaporating lotions, but with ointments. Suppositories containing codeine or opium and hyoscyamus at night will often give the patient relief. Internally, potassium bromide and belladonna tend to decrease irritation of the peripheral nerves.

Labusquière[64] regards pruritus of the vulva as a morbid condition either primary or secondary, for which the physician is by no means seldom consulted. It is necessary to keep always in mind that pruritus may be the expression of a general condition (diabetes, neurasthenia, arthritism, albuminuria, tuberculosis, etc.), and to direct the treatment so as to influence this condition, else whatever the local treatment adopted it is bound to fail. Even if a general condition is found to exist, a genital examination should never be neglected.

In certain cases this examination will reveal definite pathological conditions more or less localized in an area to which the pruritus is circumscribed—conditions entirely capable of maintaining the pruritus (such as herpes, leucoplasia, vaginitis, metritis, and cancer of the uterus), and it is to these that treatment must be applied. It is always necessary, however, in order to estimate the importance of the pathological conditions, to distinguish between primitive lesions and those which result simply from scratching and other post-pruriginous causes. In other cases, again, careful investigation, both general and local, does not reveal any pathological conditions on which the morbid symptom can be reasonably considered to depend. In such cases we can only come to the conclusion that the pruritus is essential or idiopathic, a condition which some authors maintain depends upon some central cause.

Apart from the cases in which a gen-

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[62] Monats. f. Geburtsh. u. Gynäk., April, '97.
[63] Ther. Gaz., Sept. 15, '96.
[64] Annales de Gynec. et d'Obstet., Jan., '97.

eral medicinal treatment, including a rigorous dietetic regimen, is indicated, and from those in which the discovery of a definite localized process leads to the application of well-recognized therapeutic means, satisfactory results can often be obtained by very hot lotions (from 110° to 120°) forming solution of carbolic acid varying from 1 to 2 per cent. or very cold lotions (about 40°) with the same medication. Brocq has suggested recently for pruritus of the scrotum a formula containing carbolic acid, glycerin, alcohol, and distilled water, the carbolic acid being in the proportion of about 15 grains to the ounce. This is applied by putting 1 to 4 spoonfuls of the solution in a glass of hot water—as hot as can be borne by the patient. He administers also 10 grains of antipyrine twice a day in cases in which crises of irritation occur at regular intervals. Corresponding treatment may be applied with advantage to pruritus of the vulva.

Among the useful applications are mercurial lotions. Tarnier has proposed a formula which has given him very good results. Its essential feature is its strength as a solution of perchloride of mercury, namely: 1 in 500. It contains a drachm of alcohol to the ounce, and a little rose-water. This liquid is employed at its full strength, and applied night and morning. The parts are carefully washed with tepid water, and then the lotion is swabbed over them with a piece of sponge. The application at first causes a considerable amount of burning, which may be relieved by bathing the affected parts for a few minutes with plain cold water. The applications become rapidly less painful, and a cure is usually produced in a very short time.

There are, however, a number of cases in which all the ordinary treatment fails, leading to the necessity for surgical interference by means of scarifications, section of nerves, and resection of larger or smaller portions of the tissues which are the seat of the pruritus.

D. W. S. Samways[65] treats anal pruritus by the application of collodion. It acts in the same way as the elastic stocking used in varicose veins of the leg. The application causes smarting for a few minutes, which can be prevented by the previous application of cocaine, but there is no itching for twelve to twenty-four hours after the collodion is applied.

José Codina Castelvi[66] recommends the following in pruritus ani. Carbolic acid should be administered in doses of from $^3/_4$ to $1\,^1/_2$ grains per day, in pill form, in conjunction with valerianate, as in the following formula:—

℞ Carbolic acid, $^3/_4$ grain.
Extract of valerian, $1\,^1/_2$ grains.
Powdered valerian, 3 grains.—M.

All excesses should be avoided, and horseback and bicycle riding must be prohibited. The bowels must be regulated, and before each defecation the anus and its margins are to be smeared with vaselin. The pruritic region should be washed, on arising in the morning and on retiring, with an infusion of cocoa-leaves, which should be used as hot as can be borne. To this infusion one can add a glycerin-solution of carbolic acid, so that the latter will exist in the mixture in the proportion of 1 or $1\,^1/_2$ per cent. Every third day the parts affected must be touched with a solution of nitrate of silver of 5 per cent.

After each movement of the bowels the region is to be washed with cotton soaked in the above solution, and after being cleansed the parts are dusted with

[65] Brit. Med. Jour., Nov. 21, '96.

[66] Gaseta Medica Catalana, Tome xx, Num. 23, '97.

a powder composed of talcum and zinc oxide. To calm the acute crisis, a suppository composed of the following may be inserted:—

℞ Cocaine hydrochlorate,
Morphine, of each, $^3/_{10}$ to $^3/_4$ grain.
Cocoa-butter, q. s.—M.

Shoemaker[67] recommends the following for nervous pruritus of the menopause:—

℞ Zinci oxidi, 4 $^1/_2$ grains.
Quin. sulphat., 36 grains.
Aloin, 2 $^1/_4$ grains.
Extr. et pulv. liq., q. s.
Ft. pil. xx.
Sig.: One pill three times a day.

Brocq[68] recommends that in cases of severe pruritus when parts have been much excoriated by scratching, the whole surface should be frequently washed with a boric lotion of camomile to which saponified coal-tar has been added. (Both preparations are contained in the French Pharmacopœia.) A soothing ointment of vaselin and zinc oxide is then applied, and when the irritation has subsided the following powder is dusted freely over the parts and is kept in place by a covering of absorbent cotton-wool.

The powder is a mixture of—

℞ Powdered camphor, 30 grains.
Oxide of zinc, 7 $^1/_2$ drachms.
Subnitrate of bismuth, 7 $^1/_2$ drachms.
Talc, 10 drachms.—M.

When the powder has been used for a few days, and the inflammation has subsided, the itching may be painted every other day with a weak solution of nitrate of silver, and the introduction of a suppository of cocoa-butter with cocaine and belladonna will often give relief at night. Should be used freely until the patient is well.

[67] Med. Rec., July 9, '98.
[68] Jour. de Méd. et de Chir. Prat., '97.

Cyclopædia of Current Literature.

A MODEL HOSPITAL FOR THE INSANE.

About thirty miles from Baltimore, a little off from the main line of the Baltimore and Ohio Railroad, is situated this model hospital for the insane, where the superintendent, George H. Rohé, rules the domain of 800 acres by the touch of an electric button.

The distinguishing features of this new establishment for ministering to men with minds diseased may be briefly stated to be: (1) impressing upon the inmates the fact that they are patients under treatment in a hospital; (2) dispensing with every form of mechanical or visible restraint or irritating means of compulsion; (3) finding appropriate occupation, especially out-door work, for everyone, utilizing the skilled labor of mechanics, or giving the Polish Jew, who never knew other instrument than the needle, the task of mending clothing and bedding; (4) encouraging and exacting habits of personal cleanliness, water-closets, urinals, lavatory-basins or rain-baths, soap and towels being provided on every floor in apparent superfluity; (5) instituting a quasimilitary precision and regularity in the associated operations,

in dressing and undressing, in beginning and quitting work, in going to bed and rising, bugle-calls, so far as possible, supplementing personal orders, and the uniformed attendants acting rather as captains and guides than keepers or guards.

The hospital-idea, in its full development, comprehends covering the numerous elevations embraced within the extensive limits of the estate with independent groups of buildings. One for male patients is completed and in successful operation; ground has been broken for a second for females, which is to have only female nurses, attendants, cooks, and assistants, and female medical officers; a third for epileptic insane will follow. The group completed consists of four detached buildings, each occupying the side of an open space, or court, 200 feet square, connected by covered, but uninclosed, corridors.

Here, then, the problem has been solved, so far as human intelligence can do it, of the humane treatment of those unfortunates whose minds have gone adaft. Here, amid the placid surroundings of rural life, away from every exciting cause, with agreeable out-door occupation, the unbalanced mind may recover its equilibrium, or if that cannot be, if healthy living, wholesome food, and generous indulgence cannot effect a cure, the inveterate sufferer can, at least, live peacefully, decently, and, as far as the fantasies shaped by his seething brain will permit, contentedly.

The writer himself saw a patient admitted, an acute case, whose wrists still showed the marks of the handirons he had worn, and put to bed in an open ward and kept there by a watchful attendant, or as many as might be required, and who in three days had become tractable and responded to the usual clinical questions of the physician; while another, who, as soon as he landed from the wagon that brought him, made a break to escape and thrice repeated his attempt the same day, before a week had passed was sitting quietly among the others and taking part in their work or play.

The superintendent has the rare satisfaction of having seen his plans and promises fulfilled to the very letter. Albert L. Gihon (Philadelphia Medical Journal, Nov. 5, '98).

[It is sincerely to be hoped that Dr. Rohé will have many imitators.—Ed.]

ABORTION, ACETANILID AS PREVENTIVE OF.

Acetanilid is a serviceable remedy in threatened premature explosion of the ovum. During the past few years the writer has used this drug in a considerable number of cases, and with decidedly encouraging results. In administering acetanilid, as with many other drugs, it might be well for those not accustomed to prescribing it to consider individual susceptibility and begin with small amounts, 5 to $7\,^1/_2$ grains. But even where the dose has been large, 10 to 15 grains, and repeated at short intervals (one to two hours), the writer has observed no objectionable symptoms, certainly no alarming ones. It seems to possess a special relevance in such cases. Acetanilid has proved of no less benefit in habitual than in simple threatened miscarriages. In a few cases of women who bore histories of habitual loss of the ovum during previous pregnancies, even where the symptoms were alarming,—rhythmical uterine contractions, considerable hæmorrhage, and accompanied with more or less pallor and vomiting,—a state of calm was quickly reached under the administration of acetanilid in doses of 10 to 15 grains at intervals of one,

two, or more hours. Undesirable symptoms are minimized by administering acetanilid with alcohol, strong wine, or ether. Stephen Harnsberger (Jour. Amer. Med. Assoc., Oct. 22, '98).

ASTHMA AND ITS TREATMENT.

Cases of so-called nervous asthma have been infrequent in the writer's experience. Despite the existing nervous irritability, the asthmatic attack would rarely occur were there not other discernible causes that more advanced researches may be expected to reveal. Conditions of the blood are often ignored. Malarial toxæmia is frequently present, and yet overlooked, and it is wise to act in accord with its recognition. If there be sudden chill, followed by rise of temperature and sweating, and if at the time of the chill and previous to the giving of quinine internally careful microscopical examination of the blood be made, the plasmodium malaria should be found. For an asthmatic attack of probable malarial causation increasing doses of Fowler's solution of arsenic to its physiological effect advised; if the bowels are constipated and the liver inactive, Warburg's extract in 5-grain doses three or four times daily; if anæmia be present, quinine, iron, and arsenic in a suitably-formulated pill, such as the following: 1 grain of reduced iron, 2 grains of quinine sulphate, or preferably quinine hydrochlorate, and from $^1/_{60}$ to $^1/_{30}$ grain of arsenous acid three times daily after meals. If the attack be severe, antispasmodic remedies should be employed, and patients should be permitted to smoke and inhale from a *cigaret d'Espic, datura Tatula* (Savoy and Moore), or from simple niter-paper. As a last resort, an inhalation of a small quantity of chloroform or an hypodermic of morphine and atropine may prove the only satisfactory help.

As to the reflex causes of asthma: When morbid conditions are found in the nose and throat, treatment will include operative interference to modify or remove these evidences of disease. In the presence of chronic gastric catarrh, brought on by errors of diet or alcoholic habits, frequent lavage of the stomach and a regulated regimen have afforded great relief in the asthmatic seizures. In the consideration of bronchitic cases of asthma, with some development of emphysema, questions arise that are clinically most difficult to decide. When the bronchitis is clearly defined and the secretion is slight, efforts should be directed to stimulation of the latter by appropriate means, and small repeated doses of ipecac, tartar emetic, grindelia robusta, ammonium chloride, or potassium iodide will be found very useful. When the bronchitis is also evident and attended with much bronchial secretion, belladonna or atropine must be combined in small or moderate doses with the drugs previously named, or they should be given with a little camphor and quinine in capsule or tablet, or, what is often preferable, alone, until their physiological effect is manifest. When the emphysema and bronchitis are clearly defined, and when the asthma is also pronounced, recourse must be had for temporary results to inhalation of the fumes of the antispasmodic cigarettes, the repeated use of oxygen, the administration of Hoffman's anodyne, alcohol, hot coffee, capsules of ether, or chloroform. When in connection with the previous conditions there is evident cardiac distension, resort must be had to the use of nitroglycerin or the nitrites, or to a soluble salt of caffeine (salicylate), either by the mouth or hypodermically. Occasion-

ally, blood-letting by bleeding from the arm, or the use of leeches, or wet cups to the chest or epigastrium, will afford more or less lasting relief. Usually, the relief is only temporary, and it is under these circumstances that particular care must be taken in the use of amyl-nitrite in inhalations, which seems to occasion further and more intense pulmonary congestion, and thus add an additional obstacle to a right heart already overtaxed. The climatic conditions that are best for subacute or chronic bronchitis are also those best suited to the bronchitis when complicated with asthma. Beverly Robinson (Philadelphia Med. Jour., Sept. 10, '98).

CARDIAC SYPHILIS.

The writer reports the results of a study of the hearts from a number of syphilitics not presenting any well-marked gross anatomical changes, with a view of ascertaining whether minute lesions could not be found sufficient to throw some light on the early development of luetic heart-lesions. These investigations show the vessels to be the primary point of origin of the disease, to which the interstitial myocarditis and subsequent degeneration and destruction of the muscular tissue are secondary. Such conditions may be firmly established before any functional disturbances of gross anatomical changes are evident. The rapidity is emphasized with which simple cellular infiltration is converted into fully-organized connective tissue. It is to be gathered clinically that when symptoms of this condition are evident the anatomical process has already attained some magnitude. An early correct diagnosis is imperative. Myocarditis, especially when occurring in younger patients, not clearly attributable to some other causation, should always suggest syphilis. Active syphilitic lesions of other organs would confirm the diagnosis. There are numerous cases, especially in young people with so-called weak or irritable heart, associated with bradycardia, or more especially with tachycardia, and always with more or less arhythmia, that are often the result of a syphilitic lesion, although there may be none of the graver physical signs of heart disease: no murmur, no dilation of the ventricles. In all such cases, even if the diagnosis is doubtful, the patient should be given energetic antisyphilitic treatment. A case of syphilitic angina pectoris, the result of an acute dilatation from myocarditis, is reported, in which rapid relief followed antisyphilitic treatment. In the light of this study syphilis should be given full consideration as an etiological factor in heart disease. I. Adler (New York Med. Jour., Oct. 22, '98).

CURETTE, USE OF.

The promiscuous and indiscriminate use of the curette has been the cause of more deaths than probably any other factor in gynæcological surgery.

There is no operation in gynæcological surgery that requires more knowledge of pathological conditions and a greater experience in the treatment of the diseases of women.

In the writer's experience of thirty years, fifteen of which has been largely devoted to the treatment of diseases peculiar to women, he has found far more damage done in the use of this instrument than good. Forcible dilatation and curettement is the direct cause of more abdominal sections for the removal of appendages than any other. The instrument should only be used after examination by and consultation with the most experienced men.

In endometritis it may be at very long intervals, in the practice of a very busy gynæcologist, of use. The writer has never had to curette a half dozen cases of endometritis.

In fungoid growths of the womb, small or large polypus, and also in the fungoid forms of supposed malignant disease,—where there is great loss of blood and the patient will not submit to extirpation,—the curette is of great benefit.

In absorption, miscarriage, or after labor the curette has no place except in the grossly-neglected cases where the woman has been allowed to go for weeks before the membranes and the placenta or parts of the placenta have been removed. All these cases should be treated promptly as soon as it is determined that the woman is aborting and the womb not able to throw off its contents. She should be thoroughly etherized, the hand introduced into the vagina, the finger or fingers into the womb, and every part of the membrane, placenta, and clot removed; the fingers should be used,—by sense of touch one can be absolutely sure that his operation is complete, while with curette one may scratch and scrape and wound portions of the endometrium, thus greatly aiding development of sepsis, and often the very part that should be removed is left.

In long-neglected cases the curette probably would require less violence than to attempt the removal of decomposing membranes and placenta by the fingers; but neither finger nor curette at any time without ether,—an operation without ether is rarely satisfactory. The curette is of no use in ulcerative cancer, except it be used in connection with the cautery, where it is found to be a great benefit.

In fibroid disease and myoma it is a useless and at times a dangerous procedure. Mordecai Price (Penna. Med. Jour., Oct., '98).

ECLAMPSIA, PREVENTION OF.

Pregnant women who suffer from albuminuria and are, therefore, in danger of being attacked by eclampsia, are to be treated with complete rest and milk-diet, which treatment is to be continued fourteen days after the period, when the urine is quite normal again. Drejer (Norsk Mag. for Lægevidenskaben, p. 817, '98).

EXOPHTHALMIC GOITRE IN CHILDREN.

Treatment. — Excellent results obtained from the use of strontium bromide and iodide in the treatment of exophthalmic goitre in children. The thyroid swelling quickly diminished, and lost almost all pulsatile movement; the increased force and diminished tension of the pulse and the rapid action of the heart were made more nearly normal; all dyspnœa subsided; and the prominence of the eyeballs disappeared. Only thirty-six cases of exophthalmic goitre have been observed in children under 15 years of age. It is much commoner among females than among males. Gillespie (Brit. Med. Jour., Oct. 8, '98).

HEADACHE, CHRONIC.

Treatment.—One of the most powerful drugs for the prevention of sick and nervous headaches is water. The result of the drinking of large quantities of water daily in cases of life-long addiction to the headache habit is little short of marvelous. It flushes out the poisonous accumulations of constipation, washes away toxins and germs of diarrhœa, raises the blood-pressure by diluting and carrying off through the kidneys the irritants which contract the arteri-

oles, and cuts short rheumatism in the same way. In one or all of these ways it may prevent several kinds of headache.

The most common contra-indication to water given by the stomach is motor inefficiency of that organ with or without dilatation. Editorial (Cleveland Jour. of Med., Oct., '98).

HYPERTROPHIED PROSTATE IN THE AGED.

Treatment.—All cases of prostate hypertrophy should be given at least two weeks of palliative treatment, with rest in bed. This treatment should be regulated according to the conditions. If no relief is had from this line of treatment, a thorough and systematic examination should be made for vesicle calculi and polypi, as well as structural and malignant disease of the prostate and bladder. Cystitis, acute prostatitis, and prostatic abscess should always be borne in mind. The urine should be frequently examined. In cases of cystitis the ureters should be catheterized to determine the condition of the kidneys. If by digital examination per rectum the prostate is found to be enlarged, its approximate dimensions should be noted and urethral measurements taken. The patient should then be as well prepared as is possible for operation. Having decided upon operative interference, the operator alone must decide upon what operation he will perform in the case. Chloroform should be used, as it requires less time and is not so irritating to the kidneys. The operation should consume as little time as possible. Gonangiectomy or orchidectomy can be done quicker and with less shock than any other operation. Strict attention should be given to the after-treatment. The time for relief after operation is irregular. More immediate relief is given to cases of orchidectomy, and the prostate softens and diminishes more rapidly in such cases where gonangiectomy is done. The kidneys should be carefully watched and supported after operation. Mental symptoms appeared in three of the writer's cases, two of which were due to renal disease. George W. Johnson (Medical News, October 29, '98).

INTRODUCTION OF STOMACH-TUBE WITH THE LEAST POSSIBLE EMBARRASSMENT OF THE PATIENT.

When a tube is first introduced into the stomach of a new patient it often will be for diagnostic purpose an hour after the usual test-breakfast of bread and water. Otherwise he should come with an empty stomach for the first time, if possible, unless there should be an urgent need for washing out the viscus without delay. Too much should not be said about the procedure beforehand, but what is said should be entirely of a reassuring character.

For first use is selected a small tube (not over a number 25 or 27, French), highly polished, of medium flexibility and with a conical end, having a small opening directly in the end, and at least one fenestrum on the side, about three-quarters of an inch above. A second fenestrum, half an inch higher, makes the tube less apt to block in performing lavage. Larger tubes will be needed when doing this in bad cases of gastric catarrh or of food-stagnation, especially if washed out at any time other than before breakfast.

As a lubricant for the tube warm water answers well.

Having secured the proper mental state, which should be as nearly as possible one of composure, devoid of excitement and apprehension, an apron, pref-

erably of thin rubber cloth and large enough to cover the body down to the knees, should be slipped around the patient outside the arms (so as to prevent the hands involuntary grabbing the tube at a critical moment) and be buttoned or tied behind the neck. Then he should be placed in a sitting position, in a good light, and the physician should sit down in a lower chair facing him. He should now be told that all he has to do is to open his mouth widely and breathe with unusual deepness; that the only reason, as a rule, why some persons are uncomfortable when they first take a tube is that their respiration is embarrassed as a result of a reflex irritation from the nerves of the throat, and that this can usually be avoided by breathing very deeply.

Then, taking hold of the tube as one would a pen, about six inches from the stomach end, it is passed carefully back over the center of the tongue into the pharynx. The operator's sight, and not a finger of the other hand, must be used to guide the end of the tube down through the middle of the pharynx into the œsophagus. The moment it reaches the pharynx the patient must be told to swallow, which will facilitate its entrance into the œsophagus, down which it will glide easily with the gentlest pushing, provided the patient continues breathing at least as deeply as normal and makes swallowing motions frequently. Even without the swallowing the tube can be easily and safely pushed on into the stomach if full inspirations are kept up.

It is unusual for patients to complain of any serious nausea as the result of the introduction of a tube; not more than one in twenty is excited to vomiting by it. The annoyance usually is from embarrassed respiration, the patient feeling as though he could not breathe. The distance from the teeth to the bottom of the stomach varies in even healthy persons according to their height and peculiarities of build, and in conditions of displacement or dilatation of the organ. There are two ways of determining how far to introduce the instrument. The easier is to try it first at an inch or so above the mark, and if no fluid can be made to flow, it is to be gradually pushed further, even if it is required to pass it to a point six or eight inches beyond the mark. When liquid will flow in, it must return if the tube has been passed to just the right point and not beyond it. To pass it too far is as bad as not far enough, since the end may then curl up and the opening emerge above the level of the contents.

The contra-indications for the tube will be few when the operator has become expert so as to be able to introduce it without letting the patient become unduly excited. But it will be wisest never to resort to its use soon after a hæmorrhage from any internal organ, in cases of aneurism, in advanced heart or lung disease, or in conditions of great physical debility from any cause. Boardman Reed (International Med. Mag., Oct., '98).

LUPUS ERYTHEMATOSUS.

Treatment.—The pathological histology of lupus is not so far established that it affords a valuable clue to the treatment. Though the epidermis is so exceedingly dry, the cutis shows dilatations of the lymph-spaces and lymph-channels, œdema of the papillary body, with development of larger lymph-pools, and a peculiar moist canalization of the collagenous tissues. The whole condition, therefore, of the cutis being

œdematous, softened, and readily yielding, the writer advises the application of such remedies as are suited to reduce an inflamed patch into a pale, dry, and uninflammatory condition of the skin; and to avoid carefully every remedy which might produce hyperæmia and œdema, even if otherwise apparently indicated. As to the internal treatment, he considers (1) those which have a favorable influence upon the vasomotor paresis of the face, as the alkalies, carbonate of ammonia, ichthyol-ammonia, salicylate of soda, ergot, and (2) those to which a specific action has been attributed, as phosphorus, salicin, tuberculin, iodide of starch, iodide of potassium, and arsenic. He has obtained only negative results with the iodides and arsenic; with tuberculin he has produced good effects, but no cure; with phosphorus and salicin he has had no experience. He has had favorable results from the use of carbonate of ammonia, ichthyol, and salicylate of soda in cases with a tendency to œdema and hyperæmia, but does not believe that any case has ever been cured by the use of these internal remedies without the aid of external means. Many cases, however, have certainly been cured by the sole use of external applications. The disease can often be cured by the proper use of remedies. Among the external remedies which he has seen to do most good is the following prescription:—

℞ Zinci ox.,
Boli rubræ, of each, 30 grains.
Boli albæ,
Magn. carbon., of each, 45 grains.
Amyli, 2 1/2 drachms.—M.

Another one which, long continued, he has found to be followed by a cure in a number of cases, without the help of any other remedy, is a combination of soap collodion, as in the following formula:—

℞ Collodion, 5 drachms.
Sap. virid., 1/2 to 1 drachm.—M.

Unna (Jour. Cutan. and Genito-Urin. Dis., Oct., '98).

MEAT POISONING.

A new organism connected with the production of poisonous effects due to the ingestion of diseased meat has been discovered by the writer, who investigated an outbreak at Mansfield, in which sixty-three persons became ill after eating the meat of a cow which had been killed in consequence of a diagnosis of traumatic pericarditis. Only those who ate of the minced meat in a raw state or of the partly-cooked liver were affected; those who ate of the well-cooked meat escaped without exception. The symptoms were vomiting and diarrhœa, violent headache and abdominal pain, general muscular weakness, dizziness, and lassitude. The discharges were sometimes greenish, sometimes brownish, and always extremely offensive. With few exceptions the symptoms abated in from three to five days, and all recovered except one, and that a doubtful case in a child who was not known with certainty to have partaken, and whose symptoms might have been due to other causes.

The unconsumed meat when received for examination was already well advanced in decomposition and partly maggoty. All except one piece, which was faintly acid to litmus-paper, was alkaline in reaction. Cultures on agar and in bouillin were made from a piece taken from a part which was apparently not yet in process of decomposition. Inoculation of the bouillon cultures and of small bits of the meat into white mice produced fatal results, in some cases

from eighteen to twenty-eight hours and in others within three days. A guinea-pig which received a subcutaneous injection of the bouillon culture of the crushed meat died in forty-eight hours, having shown marked lassitude and profuse diarrhœa. Section showed, in all cases, enlargement of the spleen, which was bluish-red in color, strong injection of the small intestines, and marked redness of the medullary substance of the kidneys. Cover-glass preparations from the spleen showed fairly long and broad bacilli, and the same organisms were developed on agar from the meat itself. That the outbreak was due to an infection rather than to an intoxication was shown by the facts, first, that those who ate of the meat in a well-cooked condition escaped; and, second, that mice withstood injections of 1 centimetre of heated bouillon culture, but were killed by 0.2 cubic centimetres of the culture when it was not so treated. G. Wesenberg (Zeit. f. Hyg. u. Infectionsk., Sept. 23, '98).

NASO-PHARYNGEAL ADENOIDS, DANGER OF OPERATIONS FROM, UNDER CHLOROFORM.

Case of death following immediately an operation for naso-pharyngeal adenoids under chloroform in a boy aged 6 years. The total amount of chloroform administered was about 1 fluidounce. The chloroform had been removed for two or three minutes at least before the fatal collapse, and death occurred without warning and with almost simultaneous failure of pulse and respiration.

In 1893 several brief communications appeared in the medical press of Great Britain calling attention to an alarming mortality in the adenoid operation and tonsillotomy performed under chloroform. In 1896 Dr. W. G. Holloway, Registrar of the Central London Throat and Ear Hospital, tabulated 14 deaths under chloroform in nose and throat operations that had been reported in England up to April, 1895. Of these 14 deaths under chloroform 11 were in operations on the tonsils and naso-pharyngeal adenoids reported since 1892. At the meeting of the British Laryngological Association in 1897, in a discussion on the operation for post-nasal adenoids, Wyatt Wingrave and Dundas Grant deprecated the general use of chloroform in this operation and referred to the high mortality under its use.

Including the writer's own case, he is able to record 18 deaths following the administration of chloroform for the removal of naso-pharyngeal adenoids, hypertrophied tonsils, or both.

In 4 of these 18 cases death occurred before the operation was begun; in 3, from a few moments to an hour after the operation was completed.

Some observations have been made in recent years in Vienna by Paltauf, Kolisko, and others that throw some light upon the causes of the extraordinary mortality under chloroform in this operation. It has been found post-mortem in a number of cases of sudden death from slight causes that there was present hypertrophy of the lymphoid tissue throughout the body, including the tonsils, the lymphoid structures at the root of the tongue, and the naso-pharyngeal adenoids. The thymus gland was persistent and often very large, and the intestinal follicles were markedly hypertrophied. In addition there were frequently present a dilated heart, not dependent on valvular lesions, and at times a narrowing of the aorta with small size of the peripheral vessels. This condition, which has been called *habitus*

lymphaticus, was found among others in a number of cases of death during chloroform administration. People so constituted seem to have little power of resistance to comparatively slight shocks. Nevertheless, they may be of robust physique, though usually there are evidences of developmental retardation. Brickner, commenting on Kolisko's report of the *habitus lymphaticus*, writes: "It would seem, therefore, that in anæsthetizing patients of the lymphatic temperament, or in whom lymphatic enlargement or adenoid vegetations exist, chloroform should be rigidly excluded." Both by statistical data and pathological induction this opinion is confirmed, and the conclusion seems inevitable that chloroform anæsthesia for the removal of hypertrophied pharyngeal and faucial adenoid tissue is attended by grave risks, and that chloroform should be used for this purpose only under peculiar circumstances and after careful consideration.

If general anæsthesia is desired there is no valid reason to insist upon the use of chloroform, since the indications for the brief anæsthesia usually required for the adenoid operation are met in the practice of many surgeons by nitrous oxide, or ethyl-bromide, and, where a longer period of anæsthesia is desired than these minor anæsthetics afford, we can use ether, despite its recognized disadvantages as an anæsthetic in operations upon the mouth or pharynx. Frank Whitehill Hinkel (New York Med. Jour., Oct. 29, '98).

PROGRESSIVE CIRRHOSIS OF THE LIVER, BACTERIOLOGY OF.

By numerous carefully-conducted examinations the writer proves (1) that, in at least a very large number of well-marked cases of progressive cirrhosis in man, there is to be found largely within the liver-cells, also in the lymph-spaces in the newly-formed connective tissue, a peculiar and very minute form of micro-organism present, on staining to the proper extent, as a diplococcus surrounded by a faint halo, or, when stained deeply, being a rather obscure bacterium, which may be easily mistaken for stained deposits within the cells.

2. That in the infective cirrhosis of cattle a very similar micro-organism is recognizable, present in like positions within the tissues and showing similar appearances when stained.

3. That from at least thirty cattle affected with this disease the writer has been able to isolate the micro-organism from the liver, bile, abdominal lymph-glands, and in some cases from the various organs of the body.

4. That the micro-organism isolated is a polymorphous micro-organism, appearing as a small diplococcus when grown in broth, tending to assume a distinctly bacillary form when grown for a few hours on other media, or in broth for a longer period.

5. That this micro-organism is pathogenic for the animals of the laboratory; and that in them it is to be recognized within the hepatic cells as in other regions.

6. That from a case of distinct atrophic cirrhosis in the human being he has been able to isolate from various organs of the body a similar micro-organism, which, grown in broth, has a diplococcus form; grown upon agar, is present as a short or longer bacillus according to the age of growth.

That the micro-organism only causes cirrhosis the writer does not believe; indeed, one may find that it is the cause of more than one disturbance in the liver and in other organs. The micro-organism shows itself capable of existing in

several regions of the body; in fact, of setting up what bacteriologically we regard as a septicæmic condition. J. G. Adami (Dominion Med. Monthly and Ontario Med. Jour., Oct., '98).

RINGWORM OF THE SCALP.

Great measure of success obtained in the treatment of ringworm of the scalp with a silver solution. After the head is entirely shaved each patch is scraped with a Volkmann spoon, and a solution of silver nitrate (1 drachm to the ounce) is applied with a swab-stick. This process should be repeated twice a week, the underlying parasitic growth being scraped off on each occasion before repainting with the solution. Lyle (Lancet, Oct. 8, '98).

STERILIZATION OF CATGUT BY DRY HEAT.

The following is the method of sterilizing catgut adopted by Professor Tscherning, of Copenhagen: The ordinary commercial catgut as it comes from the manufacturers is placed on trays in the sterilizer between sheets of cellulose-paper. It is then heated for six hours consecutively, for the first hour at a temperature of 150° F., for the second at 280° F. It is then removed, wrapped up, and closely sealed in an envelope of cellulose-paper, which is again placed in another envelope of slightly-larger size and similarly closed. The catgut, now incased within two firmly-sealed envelopes, is a second time placed in the sterilizer and subjected for another two hours to a temperature of 280° F. The envelopes are placed in racks in the sterilizer and contain various sizes of catgut labeled on the outside, some of a size for ligaturing the pedicle in ovariotomy, others for fine buried sutures or other purposes where absorption is desired within a short period. These envelopes can be taken from the sterilizer and placed in the pocket or bag of the operator and need not be opened until the time of operation. Thus they are very handy and portable. It is to be remembered that catgut ligatures prepared by any of the wet methods become, if kept in spirit for any length of time, hard, and need more time for absorption. If, on the other hand, they are kept in an antiseptic aqueous solution, they tend to become soft and lax, whereas if kept in any preparation of glycerin they are somewhat difficult to manipulate, owing to their extreme slipperiness. The dry catgut is without these disadvantages. J. H. Dauber (Lancet, Oct. 22, '98).

STRYCHNINE: IS ITS CONTINUAL USE UNWISE?

No one who has employed strychnine for a long time will venture to deny that its action is not sometimes accompanied by some untoward effect, but after having given it in many thousands of cases during the last ten years the writer confidently asserts that he has never witnessed any serious danger from it; that it is the most easily controlled of all active agents in the materia medica, and if carefully administered its unfavorable influence can be entirely thwarted. The plan pursued by the writer in giving strychnine is as follows: As a rule, 1 grain is divided into thirty or thirty-two doses, and one dose administered four times a day. This lasts one week, and the following week 1 $^1/_4$ grains are divided and given in the same manner. After this, instead of increasing the drug $^1/_4$ grain, as in the first week, it is augmented only $^1/_8$ grain every week until the line of toleration of the drug is approached. This is most often shown by slight twitching in a leg, by a tendency

to stiffness of the lower jaw, or by a fullness in or drawing of the neck. After this a somewhat smaller dose is given for two weeks or a month, and then an effort is made to push it to near a point of physiological toleration; or a retreat is made to a point near the initial dose, and this is gradually increased until the line of toleration is again in sight. The dose is diminished and the previous steps are repeated again and again. It will be found, however, that the dose which develops the line of toleration at one time will not, for a while at least, do this subsequently, and hence in the course of six months the writer has been able to give $^1/_8$, $^1/_6$, or $^1/_5$ grain four times a day, and with the best possible results. When strychnine is indicated in chronic diseases it must be given for effect, and in order to get its best possible effect it must be administered in large and continued doses,—small doses being worse than useless for this purpose.

In regard to the assertion that strychnine is capable of producing an irritant fever, the writer believes this to be one of the possibilities of its action, but it is not a "frequent" occurrence.

Serviceable as this agent is in meeting the acute crises of many diseases, its greatest value lies not so much in its power of acting as a temporary expedient as it does in being a permanent stimulant to the flesh- and vigor- making functions of the body. Thomas J. Mays (New York Med. Jour., Oct. 8, '98).

TUBERCULOSIS, EXANTHEMATA OF.

Under the heading of the exanthemata of tuberculosis are included those cutaneous eruptions which, although the tubercle bacillus has not been found in connection with them, are so frequently found on persons who sooner or later are shown to be infected with tuberculosis, that we are justified, indeed forced, to regard them as connected with the tuberculosis. It is probable that we here have to do with the action of the toxins produced by the bacillus. In this case the known forms of cutaneous tuberculosis as exemplified by lupus vulgaris, tuberculosis verrucosa cutis, tuberculosis cutis miliaris, and scrofuloderma are not included.

Among the tuberculous exanthemata are (1) the primary lesion, consisting of an erythematous spot or papule which frequently arises from a deeper-seated nodule. The erythematous macule or papule often shows a small vesicular-like formation in the centre. At this stage the efflorescence either undergoes involution or else a small necrotic suppurating focus forms in the centre. The result of the latter evolution is a small, sharply-defined scar. These small, white scars, in some instances no larger than a pin's head, in others considerably larger, lend a characteristic appearance to the affection. The favorite seats of the eruption are the ulnar side of the forearms and the wrists, hands, and ears, although it can affect any portion of the body. The efflorescences are sometimes grouped, and in this way offer a resemblance to lupus erythematosus.

2. Lichen scrofulosorum. This form certainly belongs in the class of tuberculous exanthemata. In spite of the local reaction about the lichen papules that has been observed by Neisser and Jadassohn after the injection of tuberculin, and in spite of the presence of giant-cells in the infiltration, this form cannot be considered a true tuberculosis of the skin. In only one case has a bacillus been found (a single one), and all experimental inoculations on animals have been negative. One case has been reported where an extensive eruption of

grouped lichen papules, precisely similar to lichen scrofulosorum, appeared in a tuberculous subject after tuberculin had been injected.

3. Eczema scrofulosorum. The form of eczema that occurs especially in older children or in young adults, and that is allied to lichen scrofulosorum appearing often in persons who have at some time been affected by the latter form of eruption. It takes the form of more or less infiltrated reddish spots, that are often simply scaly, but may be oozing with uncovered crusts. Circinate and gyrate figures are often formed. They are often accompanied by small papules about the hairs that resemble the lesions of lichen scrofulosorum. The favorite seats of the eruption are the thorax, the extensor surface of the upper arms, and the extensor surface of the lower extremities. The scalp is often affected also, where the appearances are those of a pityriasis capitis or an impetiginous eczema, which is readily healed. This form of eczema is usually symmetrical in its distribution, and often recurs.

4. Lupus erythematosus discoides. The writer, who regards lupus erythematosus as dependent upon tuberculosis, has endeavored to explain its relationship by the action of the toxins of the tubercle bacillus upon certain nerve-centres of the skin, especially the vaso-motor-trophic centres. He produces the statistics of thirty-six patients affected with the discoid form of lupus erythematosus, and asserts that two-thirds of these showed signs of tuberculosis. Another argument in favor of the dependence of the discoid form of lupus erythematosus upon tuberculosis is that this form may be combined and mingled clinically with the disseminated form. He considers that age and sex play a part in determining which of the different varieties of tuberculous exanthem is produced. Eczema scrofulosorum appears chiefly in children, and lichen scrofulosorum in children and young adults. After this comes his disseminated form of lupus erythematosus (folliculis), which appears somewhat later in life, while the discoid form is found at a still later epoch. Occasionally, and as a rarity, the latter form may appear in children. As regards sex, all forms of lupus erythematosus are much more frequent in women than in men. Lichen scrofulosorum and perhaps eczema scrofulosorum are, on the contrary, more often seen in boys and young men. If the proposition is accepted, that a relationship exists between tuberculosis and the eruptions just considered, it need not be assumed that this is a direct one. It may be supposed that the tuberculosis is only a predisposing agent which prepares the soil for another infection, although this seems unnecessary in the presence of an existing tuberculosis. In conclusion, several other affections are mentioned which may have some claim to be included among the tuberculous exanthemata: lupus pernio, erythema induratum, gangrena cachectica infantum, acne cachecticorum, etc. These exanthemata are regarded as having much importance as forerunners of a tuberculosis that will later assert itself. Boeck (Archiv f. Derm. u. Syph., '98; Boston Med. and Surg. Jour., Oct. 27, '98).

WHOOPING-COUGH, EARLY DIAGNOSIS IN.

An early diagnosis in whooping-cough can be made at once by a bacteriological examination of the nasal secretions ("primary place of infection"). The secretions of the normal mucous membranes of the nose contain very few bacteria, while in whooping-cough we

find a large mass of bacteria of one kind: a natural pure culture of "polbacteria" (Czaplewski and Hensel). This bacterium, when full grown, is two to three times as long as broad, is rounded and somewhat thickened at its ends, and is divided in the middle. Nearly all of them are surrounded by a capsule. This capsule originates in the animal body by inhibition of the external layers of the cell-membrane (by plasmolysis), and is lost by artificial cultivation (perhaps by peptonization).

The Czaplewski method of staining this bacterium consists (*a*) in the action of 1-per-cent. acetic-acid solution; (*b*) by staining with a heated 10-per-cent. carbolic-acid-glycerin-fuchsin solution.

This latter solution consists of 1 part of fuchsin, 5 parts of liquefied carbolic acid, 50 parts of glycerin, and 100 parts of water.

The Knaak contrast stain consists in staining with methylene-blue in a weak alkaline solution. This stain is then decolorized by 2-per-cent. freshly-prepared argonin solution, which reduces the methylene-blue in the cells and their nuclei quicker than in the bacteria. To prevent a reoxidation of the leuco-methylene-blue by atmospheric oxygen, the specimen is washed with a concentrated solution of cream of tartar. As contrast stain one can use a very diluted fuchsin solution (1 part of concentrated alcoholic solution to 40 parts of water).

The treatment should certainly be principally a local one. Henry Lewis Wagner (New York Med. Jour., Oct. 8, '98).

New Books Received.

The editor begs to acknowledge, with thanks, the following books:—

Practical Uranalysis and Urinary Diagnosis. A Manual for the Use of Physicians, Surgeons, and Students. By Charles W. Purdy, M.D., LL.D. Fourth Revised Edition. With Numerous Illustrations, including Photo-engravings and Colored Plates. In one Crown-Octavo Volume; 865 pages; Bound in Extra Cloth. The F. A. Davis Co., Publishers, 1914–16 Cherry Street, Philadelphia; 117 W. Forty-second St., New York City; 9 Lakeside Building, 218–220 S. Clark St., Chicago, Ill.——A Primer of Psychology and Mental Disease. For Use in Training-schools for Attendants and Nurses and in Medical Classes. By Charles B. Burr, M.D. Second Edition, Thoroughly Revised. Extra Cloth. The F. A. Davis Co., Publishers, 1914–16 Cherry St., Philadelphia; 117 W. Forty-second St., New York City; 9 Lakeside Building, 218–220 S. Clark St., Chicago, Ill.——Special Report on the Beet-sugar Industry in the United States. United States Department of Agriculture, Washington, D. C., 1897.——The Office Treatment of Hemorrhoids, Fistula, etc., Without Operation, together with Remarks on the Relation of Diseases of the Rectum to Other Diseases in Both Sexes, but Especially in Women, and the Abuse of the Operation of Colostomy. By Charles B. Kelsey, A.M., M.D., New York. E. R. Pelton, 19 E. Sixteenth St., New York City, Publisher, 1898.

Monographs Received.

The editor begs to acknowledge, with thanks, the following monographs:—

Faulty Metabolism, Nutrition, and Growth. By W. A. Walker, M.D., New York, 1898.——Heredity. By R. A. Walker, M.D., West Monterey, Pa., 1898.——Diet for Consumptives. By Reynold W. Wilcox, M.D., New York, 1898.——A

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Gude's Pepto-Mangan.—It is well known that manganese, in addition to iron, is contained in the red blood-corpuscles. Manganese is now believed to possess an oxygenating power equal, if not superior, to that of iron. It follows that a scientific combination of iron and manganese must prove of unusual virtue in any disease which causes, or which is accompanied by, a decrease in the red blood-corpuscles, or their normal ingredients. Just such a combination is Gude's Pepto-Mangan, and it has been before the profession long enough, and has been tested clinically by so many distinguished observers, that its worth is fully established. It is in anæmia, chlorosis, and amenorrhœa that this preparation is particularly useful, but it is of service also in neuralgia, chronic malaria, Bright's disease, and heart disease.

Any product which has met with such distinguished success is sure to be the prey of imitators and substitutors. Our attention has been called to the fact that in many instances preparations purporting to be Gude's Pepto-Mangan have been substituted for the genuine article. This is a practice which cannot be too severely condemned, and any found guilty of such deception should be strictly reprimanded. In order to prevent substitution the manufacturers have found it necessary to adopt special measures in bottling which will at once serve to distinguish the genuine from a spurious article.

Clinical reports have been submitted to the profession, based upon scientific investigation, not with commercial solutions, elixirs, or syrups, but with Gude's Pepto-Mangan alone. The following-named eminent men testify to its efficacy: H. C. Loomis, M.D., New York; Karl von Ruck, M.D., Asheville, N. C.; Stuart McGuire, M.D., Richmond, Va.; Jerome K. Bauday, M.D., St. Louis, Mo.; Emory Lanphear, M.D., St. Louis, Mo.; C. A. von Ramdohr, M.D., New York; H. Edwin Lewis, M.D., Burlington, Vt.; Samuel Wolfe, M.D., Philadelphia; Deering J. Roberts, M.D., Memphis, Tenn.; Hugo Summa, M.D., St. Louis, Mo.; J. S. Perekhan, Chicago; Dr. Gellhorn, Berlin, Germany; Dr. Jules Heitzmann, Vienna, Austria; Dr. S. Ascher, Hamburg, Germany.

An Extraordinary Offer.—We desire to call the attention of our readers to the proposition of H. G. Allen, publisher, 156 Fifth Avenue, New York City, contained in the advertisement on page 39, for obtaining the Encyclopædia Britannica at an exceedingly low figure. We are satisfied that this is an exceptional opportunity to get a copy of the Britannica, and we trust our readers will

Notes and Comments (continued).

take advantage of the proposition by writing to him.

Good Winter Reading for farmers in the Eastern States is now being distributed by the Chicago, Milwaukee and St. Paul Railway, free of charge to those who will send their address to H. F. Hunter, Immigration Agent for South Dakota, Room 565, Old Colony Building, Chicago, Ill.

The finely-illustrated pamphlet, "The Sunshine State," and other publications of interest to all seeking new homes in the most fertile section of the West will serve to entertain and instruct every farmer during the long evenings of the winter months. Remember, there is no charge. Address as above.

Food and Drink.—The Esperanza and Hygeia brands of Grape Juice are both food and drink for the well or sick, and indispensable in a perfect dietary.—John S. Linsley, M.D., New York City.

An Anodyne.—At Mt. Sinai Hospital, New York, Kryofine has been found to have great value as a hypnotic. In addition, its sedative influence was efficient in relieving general pruritis by internal medication. The action of the paramidolphenol is chiefly antipyretic, but its antineuralgic effect is much increased by the action of the methyl group split off from the phenetidin within the organism. This explains the powerful analgesic effects of the drug.

Far Superior.—Dr. N. Allen Heaton, Washington, D. C., writes: "S. & D.'s aseptic syringe has been adopted by the surgeons of the New York Hospital. It is far superior to any upon the market, and will do more to assist and advance hypodermatic medication than any single improvement of which I am at present aware."

Phenalgin.—Dr. Alfredo Garofalo says of Phenalgin: "I have used this valuable drug in influenza, acute rheumatism, and severe headache with considerable satisfaction. I believe that Phenalgin is an important therapeutic product and it will remain in common use." Dated Rome, Italy, September 11, 1898.

Panopepton. — Panopepton contains the constituents of meat and bread. It is, for this reason, a concentrated nutrient substance which must prove of the highest value in the numerous cases in which disease has impaired the desire for food and destroyed the power of digestion. When necessary or advisable, panopepton may be given in a pre-digested form. Panopepton is prepared by Fairchild Bros. and Foster, of New York.

"A New Created World."—If you leave home for an outing, go where you will find almost literally a new world. Such a spot is Yellowstone Park. There is no place like it in the world. You will be astonished at what you see and learn there. A month's outing in those mountains 7000 feet above the sea-level, in an atmosphere pure and invigorating, would add years to your life. There are four modern hotels, good roads—maintained by the United States Government—for riding, driving or cycling; riding-horses and pack-trains. Geysers, canyons, mud-springs, lakes, cataracts, and cascades in large number are crowded into a space 54 by 62 miles in size. If you can afford it, you wrong yourself by not going there, especially if you are a patriotic American. If you cannot afford it, then go to beautiful

Notes and Comments (continued).

Leech Lake, in Minnesota, a new and popular resort. New hotels, fine fishing and hunting, and good boating at reasonable rates. Send Charles S. Fee, of Northern Pacific Railway, St. Paul, Minn., six cents for Wonderland, '98, that describes by pen and picture both resorts. Mention where advertisement was seen.

Appurtenances of Offices and Hospital Wards.—Much minor surgical and gynæcological work is done in the physician's office. For the successful prosecution of such work suitable chairs, tables, and other accessories are important adjuncts. In the operating rooms of hospitals such apparatus are even more necessary than in private practice. To those who appreciate these facts, a visit to the warerooms of Wm. F. Bernstein & Co., of 917 Richmond Street, Philadelphia, will prove very satisfactory. This firm manufactures and deals in every variety of furniture required by the surgeon. Their exhibit is marked by the most modern improvements, and is of the most excellent quality.

Two Reliable Preparations.—The Resinol Chemical Company, of Baltimore, Md., manufacture two excellent preparations, known respectively as Elixir Cascanata and Unguent Resinol. The two are often used in conjunction with great advantage. The Elixir Cascanata is composed of aperient, alterative, and tonic ingredients. It has a gentle laxative action, promotes elimination and has a favorable influence upon the composition of the blood. The Unguent Resinol allays itching, constricts the capillary blood-vessels, and reduces inflammatory action by its antiseptic properties. These brief statements should be sufficient to convince any one that in these combinations we possess serviceable remedies against a host of disorders. Defective secretion by the glandular organs connected with the alimentary tract produces gastro-intestinal catarrh, chronic dyspepsia, lithiasis, and nervous disturbances. This condition of the blood and organs causes many inflammatory and pruriginous diseases of the skin, as, for instance, eczema, urticaria, acne, pruritus, etc. Consequently, when such combinations as the Elixir Cascanata and the Unguent Resinol are used in association, we attack both the cause and the effect of those diseases of the skin which we have named.

The Value of Bovinine.—Bovinine, unaltered arterial blood from the bullock, offers us an excellent means for the introduction of pure blood into the veins

Notes and Comments (continued).

of the human system depleted by disease. After hæmorrhage, in anæmia, chlorosis, chronic gastric or gastro-intestinal catarrh, typhoid fever, dysentery, and other prostrating diseases, Bovinine is administered with gratifying results. It has, moreover, been shown by clinical experience that the local or subcutaneous use of Bovinine, its injection into the rectum or spraying upon mucous membranes, has a marked remedial effect in cases of collapse, chronic ulceration, catarrhal affections of the upper air-passages, and in diphtheria.

White Rock Ozonate Lithia Water.—This water, which is bottled by the White Rock Mineral Springs Company, of Waukesha, Wis., is palatable to the taste, and is, therefore, readily consumed as a table drink. It is much to know merely that we are drinking a pure water. The White Rock Water, however, possesses distinct medicinal virtues. It can be recommended to those troubled by indigestion, rheumatism, gout, gravel, etc.

Unguentine.—Of this valuable and well-known preparation, Dr. F. P. Gates writes: "I used it almost exclusively in

Notes and Comments (continued).

a case of severe conjunctivitis, due to strong caustic silver nitrate, with the most gratifying results. I have treated another case of conjunctivitis, with similar results, that was brought about by chrysophanic acid, used for a ringworm. We use Unguentine exclusively in our family for all sores, bruises, diseases of the skin (including parasitic troubles) and mucous membranes, such as hæmorrhoids, etc. We have equally as good results in general practice. I treat all my cases of operative hæmorrhoids with Unguentine, successfully. Endometritis is treated handsomely by filling six-grain capsules with Unguentine and putting two or three of them as far in the uterine canal toward the fundus as possible, with suitable forceps and adjusters. The results have been fine with all I have treated so far."

Planten's Capsules.—Planten's Capsules are so well known as not to need a word of praise. We only wish to call attention here to the capsules and perloids of sandal oil. These furnish an admirable method of administering sandal oil, a remedy of undoubted efficacy. It must not be forgotten that, although this oil is most often used in specific urethritis, it is also of decided service in cystitis, pyelitis, and obstinate chronic bronchitis.

Baird Steam Fomenter.—This ingenious apparatus should be in every household. It is an easily managed device for making moist or dry continuous fomentations of even temperature. These applications are of decided utility in muscular rheumatism of all forms, chronic articular rheumatism and synovitis, catarrhal affections of the throat and bronchi, croup, diphtheria, nephritis, etc. The apparatus is inexpensive, and is fur-

Notes and Comments (continued).

nished by Baird Bros. & Co., 170 Madison Street, Chicago, Ill.

Rotherham House Hospital.—Many people have an unreasonable dread of a hospital. Nevertheless, in certain difficult cases much better results can be obtained from the comparative isolation, discipline, and the many modern appliances of institutions than by the general practitioners. Private hospitals, operated by specialists, possess peculiar advantages. Among these the Rotherham House Hospital, of Toronto, Canada, stands in the first rank. It is provided with Nauheim or Schott baths, which, in selected cases of heart disease, have proved of undoubted value. Dry superheated air-cylinders, salt-rub baths, massage, and electricity, are also among the resources of this establishment. The hospital is particularly intended for the treatment of diseases of the nervous system, rheumatism and heart disease, as well as for the practice of abdominal surgery.

La Grippe and Its Sequelæ.—For severe headache, pain, and general soreness, give a 5-grain Antikamnia Tablet, crushed, taken with a little whisky or wine, or if the pain is very severe, two tablets should be given. Repeat every two or three hours, as required. Often a single 10-grain dose is followed with almost complete relief. If, after the fever has subsided, the pain, muscular soreness and nervousness continue, the most desirable medicine to relieve these and to meet the indication for a tonic, are Antikamnia and Quinine Tablets, each containing 2½ grains Antikamnia and 2½ grains Quinine. One tablet, three or four times a day, will usually answer every purpose until health is restored.

Notes and Comments (continued).

Antikamnia and Codeine Tablets are suggested for the relief of all neuroses of the larynx, bronchial as well as the deep-seated coughs, which are so often among the most prominent symptoms.

Chionia.—Chionia has been used by numerous physicians with the utmost satisfaction to themselves and their patients. This remedy is not a direct purgative, but by virtue of its influence upon the circulation and cell activity of the liver it promotes digestion and assimilation, while at the same time it secures regular evacuation of the bowels. Owing to this valuable combination of properties, Chionia is a reliable remedy in hepatic torpor, chronic dyspepsia and constipation, gastro-duodenal catarrh, depression or irritability of spirits, lithiases, etc. It is an admirable adjunct also in the treatment of chronic malarial cachexia. From its influence upon the liver, Chionia is often effective in clearing the complexion.

Fellows's Compound Syrup of the Hypophosphites.—The above preparation is as favorably as universally known. Most of its constituents are normal components of the human body. Others affect favorably the tone of the nervous system and the metabolism of tissue. It is, therefore, a nutrient tonic and stimulant of the first class. Fellows's Hypophosphites is beneficial in anæmia, neurasthenia, chlorosis, and exhaustion following lingering illness, especially if it has been attended by suppuration. In chronic bronchitis and pulmonary tuberculosis it has long been recognized as one of the most valuable agencies at our command. Fellows's Hypophosphites has the important advantage of being a palatable preparation and always acceptable to the stomach.

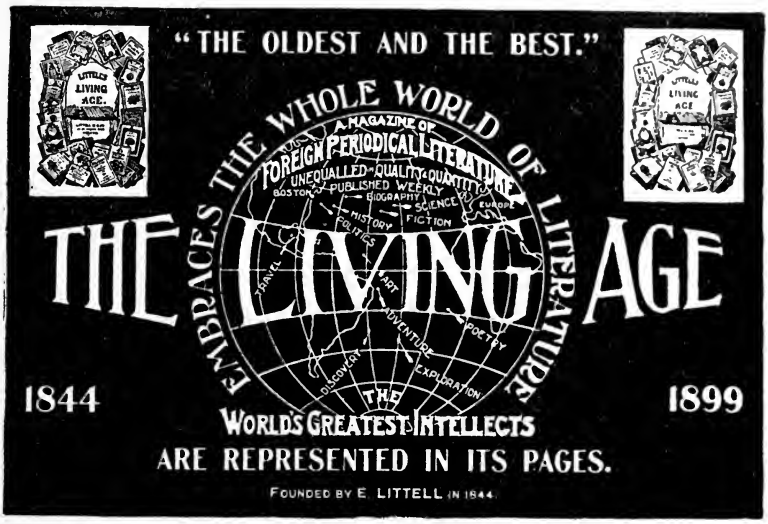
Henry Pharmacal Company.—The preparations of this company have long taken rank among standard remedies. Henry's Three Chlorides, Henry's Tri-iodides and Maizo-Lithium are reliable products which have been extensively employed. The Three Chlorides is a valuable chalybeate tonic in anæmia and chlorosis. The Tri-iodides is a reliable alterative in rheumatic and syphilitic manifestations. The Maizo-Lithium possesses the diuretic power of corn-silk united with the alkaline and solvent properties of lithium, an extremely effective combination in cystitis, lithæmia, gravel, and various affections of the genito-urinary system.

For Acute Cystitis.—

℞ Bromide of potash, $^1/_2$ ounce.
Fld. ext. gelsemin., 10 drops.
Fld. ext. hyoscyam., 2 drachms.
Lithiated hydrangea (Lambert), q. s. ad 4 ounces.

Mix.

Sig.: A dessertspoonful every four hours. Milk and flaxseed-tea as drinks. —Kansas Medical Index.



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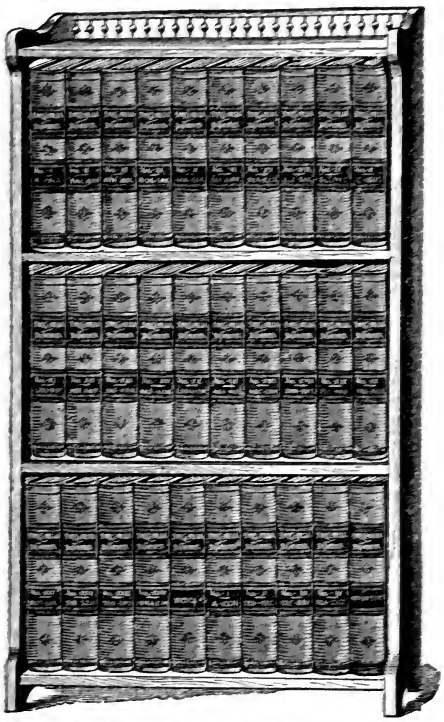

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